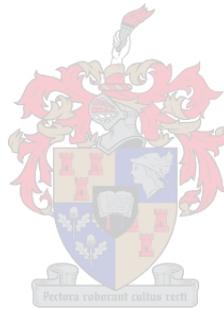


**THE DEVELOPMENT OF A BEST PRACTICE FRAMEWORK
FOR THE FORMULATION OF OVERALL AUDIT
STRATEGIES FOR INSURANCE CONTRACTS AND THE
RELATED EARNINGS OF LISTED SOUTH AFRICAN LONG-
TERM INSURERS**

by

SIMON PETRUS JOHANNES VON WIELLIGH



Dissertation presented for the Degree of Doctor of Philosophy
(Accounting) at the University of Stellenbosch.

Promoter: Prof D.S. Lubbe

Co-promoter: Ms H. Leonard

December 2005

DECLARATION

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature: _____

S.P.J. VON WIELLIGH

Date: _____

ABSTRACT

The South African long-term insurance industry is currently believed to be at an important crossroads in its existence. The industry is haunted by concerns about high cost structures, a lack of transparency in disclosure to policyholders, unfulfilled expectations of policyholders and the proliferation of available investment vehicles in the market. These concerns are exerting pressure on the existing products and practices of South African long-term insurers.

The audits of these insurers are of a complex and high-risk nature as a result of the complexity of their operations and, in particular, the highly complex actuarial valuation process in respect of policy liabilities. The prevailing auditing standards in South Africa require auditors to include policy liabilities in the ambit of their audit opinions.

Recent investigations into failed long-term insurers and their audits, including those of local Fedsure Life, British Equitable Life Assurance Society and Australian HIH Insurance, demonstrate the high risk involved in the audits of long-term insurers.

Against this background, the objective of this research was to develop a best practice framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers.

To justify the focus of the research on the abovementioned components of the financial statements of listed South African long-term insurers, a questionnaire was developed and sent to auditors of all long-term insurers listed on the JSE Securities Exchange South Africa for completion. Responses were processed to calculate a Relative Inherent Risk Index specifically developed for use in this research, ranking various industry-specific account balances and classes of transactions on the basis of their potential exposure to inherent risk. The results of this process provided significant support for the hypotheses that policy liabilities and the related earnings are potentially exposed to the highest levels of inherent risk. The remainder of the research consequently focused on these components.

A further very comprehensive questionnaire was developed to collect data with respect to respondents' views of potential best practices for the audit of various aspects relating to policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers, on the basis of their extensive experience in the industry. This questionnaire was sent to experienced auditors responsible for the audits of the five largest listed long-term insurers in South Africa for completion.

Responses were received from four of the five potential respondents, resulting in an 80% response rate, enabling meaningful analysis and interpretation of the data. Responses were analysed, interpreted and documented in the form of a detailed best practice framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings.

The lack of a fifth response was compensated for by a review of the research findings by experienced auditors of Deloitte and the provision of their opinions thereon. Deloitte was selected for this purpose as the fact that this auditing firm is the only one of the so-called "Big Four" auditing firms that does not act as auditor of one of the selected target long-term insurers, resulted in the initial exclusion of the firm's views from the research. The framework was updated to reflect these opinions and now incorporates input from all of the so-called "Big Four" auditing firms.

The framework provides a comprehensive discussion of all possible types of audit procedures that may be relevant to the audit of all aspects of policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers. As no such framework existed prior to this research, the development thereof made a significant contribution to existing knowledge. This contribution is the result of, *inter alia*, the method followed in designing the framework, resulting in it representing a synthesis of, *inter alia*, the following:

- existing international and limited local guidance for auditors and, in particular, auditors of long-term insurers, customised for the South African environment;

- best practices currently in use on the audits of listed South African long-term insurers; and
- views of experienced practitioners on the abovementioned types of best practices that might not be employed at the moment, but that should, in their views, be employed in future.

The valuable contribution of this research to existing knowledge is clear from the fact that numerous publications in popular professional as well as accredited academic journals, plus a paper delivered at a conference have resulted from it (refer to the source list and Appendix A). Furthermore, the South African Institute of Chartered Accountants has approved a project to update existing South African guidance for auditors of long-term insurers on the basis of the findings of this research.

UITTREKSEL

Die Suid-Afrikaanse langtermynversekeringsbedryf word op die oomblik geag by 'n belangrike kruispad in sy bestaan te wees. Kommer oor hoë kostestrukture, onvoldoende deursigtigheid in openbaarmaking aan polishouers, onvervulde verwagtinge van polishouers en die uitbreiding van beskikbare beleggingsmoontlikhede in die mark, spook by die bedryf. Hierdie bronne van kommer veroorsaak druk op die bestaande produkte en praktyke van Suid-Afrikaanse langtermynversekeraars.

Die oudits van hierdie versekeraars is van 'n komplekse en hoërisiko-aard as gevolg van die kompleksiteit van hul bedrywighede en veral die hoogs komplekse aktuariële waardasieproses van polisverpligtinge. Die toepaslike ouditstandaarde in Suid-Afrika vereis van ouditeure om polisverpligtinge by die omvang van hul ouditmenings in te sluit.

Onlangse ondersoeke rakende onsuksesvolle langtermynversekeraars en hul oudits, insluitend dié van plaaslike Fedsure Life, die Britse Equitable Life Assurance Society en die Australiese HIH Insurance, demonstreer die hoë risiko betrokke by die oudits van langtermynversekeraars.

Teen hierdie agtergrond was die doel van hierdie navorsing om 'n "beste praktyk"-raamwerk vir die formulering van oorkoepelende ouditstrategieë vir polisverpligtinge voortspruitend uit versekeringskontrakte en die verwante verdienste van genoteerde Suid-Afrikaanse langtermynversekeraars te ontwikkel.

Om die fokus van die navorsing op bogenoemde komponente van die finansiële state van genoteerde Suid-Afrikaanse langtermynversekeraars te ondersteun, is 'n vraelys ontwikkel en vir voltooiing uitgestuur aan die ouditeure van alle langtermynversekeraars genoteer op die JSE Sekuriteitebeurs Suid-Afrika. Response is verwerk om 'n Relatiewe Inherente Risiko Indeks, spesifiek ontwikkel vir gebruik in hierdie navorsing, te bereken, waarvolgens verskeie industriëspesifieke rekeningsaldo's en transaksieklasse in rangorde geplaas is op grond van hul potensiële blootstelling aan inherente risiko. Die resultate van hierdie proses het

beduidende steun gebied vir die hipoteses dat polisverpligtinge en die verwante verdienste potensieel aan die hoogste vlakke van inherente risiko blootgestel is. Die restant van die navorsing het derhalwe op hierdie komponente gefokus.

'n Verdere, baie omvattende vraelys is ontwikkel om data te versamel rakende respondente se standpunte rondom moontlike beste praktyke vir die oudit van verskeie aspekte van polisverpligtinge voortspruitend uit versekeringskontrakte en die verwante verdienste van genoteerde Suid-Afrikaanse langtermynversekeraars. Die respondente se standpunte is gegrond op hul uitgebreide ondervinding in die industrie. Hierdie vraelys is aan ervare ouditeure verantwoordelik vir die oudits van die vyf grootste langtermynversekeraars in Suid-Afrika gestuur vir voltooiing.

Response is ontvang van vier van die moontlike vyf respondente, dit wil sê 'n 80% responsvlak, wat die betekenisvolle ontleding en vertolking van die data moontlik gemaak het. Response is ontleed, vertolk en gedokumenteer in die vorm van 'n gedetailleerde bestepraktyk-raamwerk vir die formulering van oorkoepelende ouditstrategieë vir polisverpligtinge voortspruitend uit versekeringskontrakte en die verwante verdienste.

Daar is vir die ontbrekende vyfde respons gekompenseer deurdat ervare ouditeure van Deloitte die navorsingsbevindinge bestudeer en hul menings daarvoor gegee het. Deloitte is vir hierdie doel gekies aangesien die feit dat dié ouditeursfirma die enigste van die sogenaamde “Groot Vier” ouditeursfirmas is wat nie as ouditeure van een van die vyf geselekteerde teiken-langtermynversekeraars optree nie, veroorsaak het dat die firma se gesigspunte oorspronklik by die navorsing uitgesluit was. Die raamwerk is bygewerk om hierdie menings in te sluit, en dit inkorporeer daarna insette van al die sogenaamde “Groot Vier” ouditeursfirmas.

Die raamwerk verskaf 'n omvattende bespreking van alle moontlike tipes ouditprosedures wat relevant mag wees vir die oudit van alle aspekte van polisverpligtinge voortspruitend uit versekeringskontrakte en die verwante verdienste van genoteerde Suid-Afrikaanse langtermynversekeraars. Aangesien geen sodanige raamwerk voor hierdie navorsing bestaan het nie, het die ontwikkeling daarvan 'n beduidende bydrae tot bestaande kennis gelewer. Hierdie bydrae is die

gevolg van onder andere die metode gevolg in die ontwerp van die raamwerk, wat tot gevolg het dat dit 'n sintese verteenwoordig van onder andere die volgende:

- bestaande internasionale en beperkte plaaslike riglyne vir ouditeure en spesifiek ouditeure van langtermynversekeraars, aangepas vir die Suid-Afrikaanse omgewing;
- beste praktyke tans in gebruik in die oudits van genoteerde Suid-Afrikaanse langtermynversekeraars; en
- standpunte van ervare praktisyns oor bostaande tipes beste praktyke wat moontlik nie tans in gebruik is nie, maar na hul menings in die toekoms gebruik behoort te word.

Die waardevolle bydrae van hierdie navorsing tot bestaande kennis blyk duidelik uit die feit dat daar reeds verskeie publikasies in populêre professionele sowel as geakkrediteerde akademiese vaktydskrifte, asook 'n referaat by 'n kongres daaruit voortgevloei het (verwys na die bronnelys asook Aanhangel A). Verder het die Suid-Afrikaanse Instituut van Geoktrooieerde Rekenmeesters reeds op grond van die bevindinge van hierdie navorsing 'n projek goedgekeur om bestaande Suid-Afrikaanse riglyne vir ouditeure van langtermynversekeraars by te werk.

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INDEX

	Page
DECLARATION	i
ABSTRACT	ii
UITTREKSEL	v
ACKNOWLEDGEMENTS	viii
INDEX	ix
LIST OF TABLES	xviii
LIST OF FIGURES	xxi
LIST OF FREQUENTLY USED ACRONYMS	xxii
CHAPTER 1: INTRODUCTION AND BACKGROUND	1
1. INTRODUCTION	3
2. BACKGROUND AND LITERATURE STUDY	5
2.1 The South African long-term insurance industry	5
2.2 Financial reporting	9
2.2.1 <i>Background</i>	9
2.2.2 <i>Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers</i>	18
2.3 Audit issues	20
2.3.1 <i>Lack of South African financial reporting guidance</i>	21
2.3.2 <i>Complexity of accounting for and presentation of long- term insurance activities</i>	23
2.3.3 <i>Complexity of the actuarial valuation process</i>	26
2.3.4 <i>Materiality</i>	28
2.3.5 <i>Availability of sufficient appropriate audit evidence</i>	32
2.3.6 <i>Going concern risk</i>	34
2.3.7 <i>Impact of HIV/AIDS</i>	35
3. OVERVIEW OF THE REMAINDER OF THE DISSERTATION	37
4. CONCLUSION	40

CHAPTER 2: RESEARCH OBJECTIVE, DESIGN, METHOD AND SCOPE	41
1. INTRODUCTION	44
2. RESEARCH OBJECTIVE AND VALUE	44
3. OVERALL RESEARCH DESIGN AND METHOD	47
4. DESIGN AND METHOD FOR RESEARCH ON OVERALL AUDIT STRATEGIES	50
4.1 Steps followed in the research process	51
4.2 Research design	51
4.2.1 <i>Qualitative vs. quantitative research designs</i>	51
4.2.2 <i>Mouton's typology</i>	55
4.2.2.1 <i>Empirical vs. non-empirical</i>	55
4.2.2.2 <i>Primary vs. existing (secondary) data</i>	55
4.2.2.3 <i>Degree of control over data</i>	56
4.2.3 <i>Further classification of the research design</i>	56
4.2.3.1 <i>Exploratory vs. validational research</i>	56
4.2.3.2 <i>Descriptive vs. explanatory studies</i>	57
4.2.3.3 <i>Case study research</i>	58
4.2.4 <i>Conclusion</i>	59
4.3 Data collection	60
4.4 Data analysis	66
5. RESEARCH SCOPE	67
5.1 The overall audit strategy	67
5.2 Insurance contracts	68
5.3 Literature review	70
5.4 Questionnaire to identify elements of financial statements potentially exposed to a high level of inherent risk	72
5.5 Questionnaire to identify processes and obtain information regarding overall audit strategies	72
5.6 Other	75
5.6.1 <i>Audit opinions on regulatory returns</i>	75
5.6.2 <i>Audit opinions on interim financial reports</i>	76
6. CONCLUSION	76

CHAPTER 3: HIGH INHERENT RISK INDUSTRY-SPECIFIC ELEMENTS IN FINANCIAL STATEMENTS OF LISTED SOUTH AFRICAN LONG-TERM INSURERS	78
1. OVERVIEW	80
2. INTRODUCTION AND RESEARCH OBJECTIVE	80
3. RESEARCH DESIGN AND METHOD	83
4. LITERATURE REVIEW	86
4.1 The concept of “inherent risk”	86
4.2 Aspects relevant to accounting and disclosure by listed South African long-term insurers	93
4.3 Aspects relevant to the audit of listed South African long-term insurers	94
5. INDUSTRY-SPECIFIC SIGNIFICANT ACCOUNT BALANCES AND OTHER ELEMENTS	96
6. HYPOTHESES	98
6.1 Nature of the asset, liability or transaction	99
6.2 History of errors	99
6.3 Complexity of transactions	99
6.4 Degree of judgement involved	100
6.4.1 <i>Policy liabilities</i>	101
6.4.2 <i>Earnings from long-term insurance activities</i>	101
6.5 Unusual (non-routine) transactions	102
6.6 Risk of fraud	104
6.7 Materiality	104
6.8 Exposure to volatility in economic factors	104
6.9 Formulation of hypotheses	105
7. EMPIRICAL STUDY AND RESULTS	105
7.1 Overall results	105
7.2 Earnings	108
7.3 Policy benefits	109
8. CONCLUSION	110

CHAPTER 4: SELECTED PROCESSES AFFECTING POLICY LIABILITIES AND THE RELATED EARNINGS	112
1. INTRODUCTION	114
2. CONDENSED LITERATURE REVIEW	115
3. EMPIRICAL RESEARCH FINDINGS RELATING TO PROCESSES AFFECTING POLICY LIABILITIES AND THE RELATED EARNINGS	116
3.1 Introduction	116
3.2 Primary processes	119
3.3 Accounting processes	125
4. CONCLUSION	126
CHAPTER 5: ANALYSIS AND INTERPRETATION OF RESPONSES TO QUESTIONNAIRE RELATING TO OVERALL AUDIT STRATEGIES	128
1. INTRODUCTION	133
1.1 General	133
1.2 Relationship to the research objective	135
1.3 General profile of respondents	138
2. GENERAL DEMOGRAPHIC ANALYSIS OF RESPONSES	140
2.1 Introduction	140
2.2 Financial reporting and auditing frameworks	140
2.3 Analysis of audit hours	141
2.4 Composition and profile of audit teams	144
2.5 Overall audit strategies	148
2.6 Transaction processing and audit trails	150
2.7 Product profiles	151
2.8 Monitoring of actuarial assumptions	156
2.9 Reinsurance	158
2.10 Conclusion	164
3. FINDINGS RELATING TO KNOWLEDGE OF THE BUSINESS OF THE CLIENT	164
3.1 Introduction	164
3.2 Knowledge of product types	165

3.3	Knowledge of bases of valuation and profit entitlement policies	170
3.4	Knowledge of actuarial guidance and regulatory matters	171
	3.4.1 <i>Introduction</i>	171
	3.4.2 <i>Actuarial guidance</i>	171
	3.4.3 <i>Regulatory requirements</i>	174
3.5	Knowledge relating to actuarial assumptions	176
3.6	Knowledge of non-accounting statistical data	178
3.7	Conclusion	178
4.	FINDINGS RELATING TO BUSINESS AND ACCOUNTING PROCESSES AND THE RELATED INTERNAL CONTROLS OF THE CLIENT	179
4.1	Introduction	179
4.2	The underwriting process	180
4.3	Information technology processes	182
4.4	Reinsurance processes	186
4.5	Processes relating to actuarial assumptions	189
	4.5.1 <i>Introduction</i>	189
	4.5.2 <i>Collection of underlying data</i>	190
	4.5.3 <i>Derivation of assumptions from underlying data</i>	191
4.6	Processes relating to source data used in the actuarial valuation	193
4.7	Conclusion	195
5.	FINDINGS RELATING TO MATERIALITY	196
5.1	Introduction	196
5.2	Research findings	196
5.3	Conclusion	204
6.	FINDINGS RELATING TO THE NATURE OF AUDIT PROCEDURES	204
6.1	Introduction	204
6.2	Valuation methods	206
6.3	Assumptions	207
	6.3.1 <i>Introduction</i>	207
	6.3.2 <i>Underlying data</i>	208
	6.3.3 <i>Derivation of assumptions</i>	211
6.4	Profit entitlements and earnings	217

6.5	Source data	220
6.5.1	<i>Introduction</i>	220
6.5.2	<i>Source data contained in the valuation masterfiles</i>	221
6.5.3	<i>Source data contained in the in-force database</i>	222
6.5.4	<i>Transfer of data between in-force database and valuation masterfiles</i>	230
6.5.5	<i>Various other aspects relating to source data</i>	232
6.6	Actuarial calculations	234
6.7	Validation and financial reporting of valuation result	243
6.8	Analytical procedures	249
6.9	Miscellaneous other aspects relating to the nature of audit procedures	252
6.9.1	<i>Management representations</i>	252
6.9.2	<i>Deferred acquisition costs</i>	253
6.9.3	<i>Non-profitable insurance contracts</i>	255
6.9.4	<i>Reinsurance</i>	256
6.9.5	<i>Investment return guarantees</i>	258
6.9.6	<i>Disclosure-related aspects</i>	258
6.10	Conclusion	259
7.	FINDINGS RELATING TO THE TIMING OF AUDIT PROCEDURES	260
7.1	Introduction	260
7.2	Research findings	261
7.3	Conclusion	263
8.	FINDINGS RELATING TO RELIANCE ON THE WORK OF INTERNAL AUDIT	263
8.1	Introduction	263
8.2	Research findings	264
8.3	Conclusion	265
9.	FINDINGS RELATING TO MISCELLANEOUS OTHER MATTERS RELEVANT TO THE AUDIT OF POLICY LIABILITIES ARISING UNDER INSURANCE CONTRACTS AND THE RELATED EARNINGS	266
9.1	Introduction	266
9.2	Changes in overall audit strategies since 1998	266

9.3	Audit of smaller, non-listed South African long-term insurers	267
9.4	Conclusion	268
10.	OVERALL CONCLUSION	268

CHAPTER 6: THE INCORPORATION OF ACTUARIAL EXPERTISE INTO THE OVERALL AUDIT STRATEGY		270
1.	INTRODUCTION	273
2.	INTERNATIONAL AND LOCAL PROFILE OF THE ACTUARY	273
3.	RESPONSIBILITIES OF THE STATUTORY ACTUARY AND AUDITOR	277
3.1	Introduction	277
3.2	The auditor	277
3.3	The statutory actuary	278
3.4	Conclusion	280
4.	EXISTING GUIDANCE RELATING TO OVERALL AUDIT STRATEGIES	281
4.1	Existing international guidance	281
4.2	Existing South African guidance	284
5.	EMPIRICAL RESEARCH FINDINGS RELATING TO THE INCORPORATION OF ACTUARIAL EXPERTISE INTO THE OVERALL AUDIT STRATEGY	286
5.1	Introduction	286
5.2	Actuarial expertise in the audit process	288
5.3	Reliance on the work of an actuary	295
5.3.1	<i>Introduction</i>	295
5.3.2	<i>Findings relating to all audits of listed South African long-term insurers</i>	295
5.3.2.1	<i>General</i>	295
5.3.2.2	<i>Competence and expertise of the actuarial expert</i>	298
5.3.2.3	<i>Objectivity and independence of the actuarial expert</i>	299
5.3.2.4	<i>Scope of the work of the actuarial expert</i>	300

5.3.2.5	<i>Appropriateness of the work of the actuarial expert as audit evidence</i>	301
5.3.2.6	<i>Review and conclusion of the audit</i>	303
5.3.3	<i>Findings relating to audits where the auditor relies on the work of the statutory actuary</i>	309
5.3.3.1	<i>Competence and expertise of the statutory actuary</i>	310
5.3.3.2	<i>Objectivity and independence of the statutory actuary</i>	310
5.3.3.3	<i>Scope of the work of the statutory actuary</i>	312
5.3.3.4	<i>Appropriateness of the work of the statutory actuary as audit evidence</i>	314
5.3.3.5	<i>Communication between the auditor and the statutory actuary</i>	315
5.4	Conclusion	321
6.	PITFALLS AND PROBLEMS	322
6.1	Introduction	322
6.2	Research findings	323
6.2.1	<i>Lack of experience of audit staff and complexity of actuarial valuation process</i>	323
6.2.2	<i>Improper project management</i>	325
6.2.3	<i>Unwarranted reliance on the work of the statutory actuary</i>	325
6.2.4	<i>Appropriateness of the work of the statutory actuary</i>	326
6.2.5	<i>Strained relationship between professions</i>	326
6.3	Conclusion	327
7.	OVERALL CONCLUSION	328
	CHAPTER 7: SUMMARY AND CONCLUSION	330
1.	SUMMARY	331
2.	AREAS IDENTIFIED FOR FUTURE RESEARCH	337
3.	CONCLUSION	339

SOURCE LIST 341

APPENDICES

A:	Article that appeared in <i>Meditari Accountancy Research</i> , 2004, Volume 12 Number 1, pages 195-217	355
B:	E-mail by P.J. Strachan of SAICA to introduce and secure support for the research	395
C:	Introductory covering e-mail from S.P.J. von Wielligh to respondents	398
D:	Introductory letter	400
E:	Summarised <i>Curriculum Vitae</i> of researcher sent with introductory letter (the latter appears in Appendix D)	412
F:	Covering e-mail for research questionnaire relating to overall audit strategies (questionnaire appears in Appendix G)	417
G:	Research questionnaire relating to overall audit strategies	420
H:	Deloitte request for comment and input	484
I:	Research questionnaire relating to assessment of inherent risk	489
J:	Relative Inherent Risk Index per account with individual responses	494

LIST OF TABLES

	Page
Table 1-1: Ranking of South African long-term insurers (2000 financial years)	5
Table 1-2: Ranking of South African long-term insurers (2003/2004 financial years)	6
Table 1-3: Summary of financial reporting guidance issued in Australia, New Zealand, the UK and the USA as at 28 February 2005	11
Table 1-4: Methods of profit reporting by long-term insurers	15
Table 2-1: Steps in this research and corresponding location	51
Table 2-2: Summary of relevant auditing guidance issued in Australia, Canada, New Zealand, SA, the UK and the USA as at 28 February 2005	71
Table 2-3: Listed South African long-term insurers and their auditors as at 29 October 2003	73
Table 3-1: Listed long-term insurers of which the financial statements were reviewed	97
Table 3-2: Relative Inherent Risk Index per account	107
Table 4-1: Primary processes in a long-term insurer	120
Table 4-2: Order of primary processes in the value chain	121
Table 4-3: Primary process objectives	123
Table 4-4: Primary processes directly affecting policy liabilities and related earnings	123
Table 5-1: Profile of respondents	138
Table 5-2: Analysis of external audit hours	141
Table 5-3: Analysis of average number of team members per role	145
Table 5-4: Analysis of experience and specialised training of audit team members	146
Table 5-5: Extent of insurance contracts	152
Table 5-6: Extent of participating insurance contracts	152
Table 5-7: Comparison of primary valuation methods	153
Table 5-8: Regularity of monitoring of assumptions	157
Table 5-9: Extent of reinsurance premiums paid and reinsurance policy liabilities	159
Table 5-10: Number of companies involved in reinsurance arrangements	161
Table 5-11: Types of reinsurance arrangements	162
Table 5-12: Important characteristics of products	167

Table 5-13: Methods to understand valuation bases and profit entitlement policies	170
Table 5-14: Level of knowledge of Professional Guidance Notes required	172
Table 5-15: Assumptions critical to the valuation of insurance contracts	177
Table 5-16: Significant aspects of new business underwriting process	181
Table 5-17: Significant aspects of underwriting process during claims procedures	182
Table 5-18: Applications for which a high level of audit assurance should be obtained	184
Table 5-19: Outward reinsurance: control-related aspects to be audited	186
Table 5-20: Inward reinsurance: control-related aspects to be audited	187
Table 5-21: Transaction cycles: recording of transactions in in-force database	194
Table 5-22: Significant users of financial statements	197
Table 5-23: Disclosure of materiality and tolerable error amounts to statutory actuary	203
Table 5-24: Insurance contract-related data in in-force database to be traced to source	223
Table 5-25: Insurance contract-related data to be traced from source to in-force database for accuracy	226
Table 5-26: Insurance contract-related data to be traced from source to in-force database for completeness	227
Table 5-27: Significant suspense accounts	233
Table 5-28: Recognised valuation models in use	235
Table 5-29: Types of audit procedures to test allocation of premiums	240
Table 5-30: Types of audit procedures to test allocation of policy benefits	241
Table 5-31: Audit procedures to test creation and cancellation of units	242
Table 5-32: Types of audit procedures for reasonableness and validity of actuarial calculations	244
Table 5-33: Unusual occurrences for which valuation results should be reviewed	245
Table 5-34: Audit focus areas relating to negative bonus stabilisation reserves	246
Table 5-35: Types of audit procedures relating to journal entries	249
Table 5-36: Accounting treatment of acquisition costs	254
Table 5-37: Client correspondence to be reviewed by the auditor	259
Table 5-38: Timing of audit procedures performed prior to year-end	261
Table 5-39: Items to be included in subsequent events review	262
Table 6-1: Overall audit strategy alternatives for actuarial expertise	289

Table 6-2: Full-time employment of qualified actuaries by auditing firms	291
Table 6-3: Primary reasons for the use of independent consulting actuaries	292
Table 6-4: Contents of engagement letter of independent consulting actuary	294
Table 6-5: Factors to consider when assessing risk of error in work of actuarial expert	297
Table 6-6: Courses of action: doubt about sufficiency or appropriateness of actuarial expert's work	302
Table 6-7: Factors to consider when reviewing findings of actuarial expert	303
Table 6-8: Circumstances in which auditor should review working papers of actuarial expert	304
Table 6-9: Circumstances in which a second actuarial expert should be considered	306
Table 6-10: Documentation to be included in audit working papers	308
Table 6-11: Actuarial documentation useful for audit purposes	315
Table 6-12: Matters to be covered in record of understanding or terms of reference	317
Table 6-13: Matters to be discussed with statutory actuary during audit planning	318
Table 6-14: Order of communication between auditor and statutory actuary	319
Table 6-15: Challenges and problems experienced by auditors	323

LIST OF FIGURES

	Page
Figure 1-1: Differences in profit reporting over time: high profit margin contract	16
Figure 1-2: Differences in profit reporting over time: low profit margin contract	17
Figure 4-1: Generic value chain of listed South African long-term insurers, excluding support processes	122

LIST OF FREQUENTLY USED ACRONYMS

AC:	Statement of Generally Accepted Accounting Practice issued by SAICA
AICPA:	American Institute of Certified Public Accountants
APB:	Auditing Practices Board (United Kingdom)
ASSA:	Actuarial Society of South Africa
CICA:	Canadian Institute of Chartered Accountants
IAASB:	International Auditing and Assurance Standards Board
IASB:	International Accounting Standards Board
IFAC:	International Federation of Accountants
IFRS:	International Financial Reporting Standard
ISA:	International Standard on Auditing
PAAB:	Public Accountants' and Auditors' Board (South Africa)
PGN:	Professional Guidance Note issued by the ASSA
SAAS:	South African Auditing Standard
SAICA:	South African Institute of Chartered Accountants

CHAPTER 1
INTRODUCTION AND BACKGROUND

	Page
1. INTRODUCTION	3
2. BACKGROUND AND LITERATURE STUDY	5
2.1 The South African long-term insurance industry	5
2.2 Financial reporting	9
2.2.1 <i>Background</i>	9
2.2.2 <i>Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers</i>	18
2.3 Audit issues	20
2.3.1 <i>Lack of South African financial reporting guidance</i>	21
2.3.2 <i>Complexity of accounting for and presentation of long- term insurance activities</i>	23
2.3.3 <i>Complexity of the actuarial valuation process</i>	26
2.3.4 <i>Materiality</i>	28
2.3.5 <i>Availability of sufficient appropriate audit evidence</i>	32
2.3.6 <i>Going concern risk</i>	34
2.3.7 <i>Impact of HIV/AIDS</i>	35
3. OVERVIEW OF THE REMAINDER OF THE DISSERTATION	37
4. CONCLUSION	40

LIST OF TABLES

	Page
Table 1-1: Ranking of South African long-term insurers (2000 financial years)	5
Table 1-2: Ranking of South African long-term insurers (2003/2004 financial years)	6
Table 1-3: Summary of financial reporting guidance issued in Australia, New Zealand, the UK and the USA as at 28 February 2005	11
Table 1-4: Methods of profit reporting by long-term insurers	15

LIST OF FIGURES

	Page
Figure 1-1: Differences in profit reporting over time: high profit margin contract	16
Figure 1-2: Differences in profit reporting over time: low profit margin contract	17

1. INTRODUCTION

The South African long-term insurance industry is currently believed to be at an important crossroads in its existence. Grave concerns have recently been expressed about high cost structures (Barnard Jacobs Mellet Securities (Pty) Ltd, 2003:1; Basson, 2004b; Basson, 2005; Harris, 2004:48) and a lack of transparency in disclosure to policyholders (Barnard Jacobs Mellet Securities (Pty) Ltd, 2003:1; Basson, 2004b). The unfulfilled expectations of policyholders and the proliferation of the number of alternative investment vehicles available to the market are further issues of concern to these insurers (Finansies & Tegniek, 2005b: 22). Heated debates on these and other issues abound in the media (Basson, 2004c; Laschinger, 2005:56), creating pressure on the existing products and practices of South African long-term insurers.

The auditors of South African long-term insurers should realise that these audits are complex, high-risk audits because of the complexity of the operations of these companies (AICPA, 2003:para. 1.15). The British Auditing Practices Board states that “the degree of inherent uncertainty and judgement involved in the preparation of an insurer’s financial statements exceeds that of most organisations” (APB, 1999:para. 15).

The Canadian Office of the Superintendent of Financial Institutions states that “valuation problems [relating to policy liabilities of long-term insurers] are becoming incredibly technical” (OSFI, 2001:6) and that “the determination of actuarial liabilities is not well understood outside the actuarial profession” (OSFI, 2001:12). Since the promulgation of SAAS 620: *Using the work of an expert* (PAAB, 1998) in 1998 (recently replaced by ISA 620: *Using the work of an expert* (IAASB, 2005¹)), auditors in South Africa are required to include these liabilities in the ambit of their audit opinions.

¹ With effect from 1 January 2005, all auditing pronouncements, including International Standards on Auditing issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants, have been adopted as the prevailing auditing pronouncements in South Africa. Circular B.1/2004 (PAAB, 2004) explains the adoption process. As a result of this adoption process, these standards do not have specific issue dates, which complicated referencing in this dissertation. The effective date of adoption being 1 January 2005, it was decided to reference all these standards as “2005”, followed by a letter to distinguish them.

The high risk involved in the audit of long-term insurers is further demonstrated by a number of recent investigations into failed long-term insurers and their audits, including that of local Fedsure Life (FSB, 2003; FSB, 2005), Equitable Life Assurance Society in the United Kingdom (Murphy, 2005) and HIH Insurance in Australia (Sheldon, 2002).

Against this background, the ultimate objective of this research is to develop a best practice framework for the formulation of effective and efficient overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers. This objective is elaborated on in Chapter 2: *Research objective, design, method and scope*.

The concept of “insurance contracts” mentioned in the abovementioned objective of the research is discussed in Chapter 2, Section 5.2: *Insurance contracts*. An overall audit strategy for all aspects of insurance contracts would comprise many aspects that are not the focus of this research, such as premium income and commission expenses. This research focuses on two specific high-risk areas arising from insurance contracts, namely policy liabilities and the related earnings. The reason for the focus on these areas is discussed in Chapter 2: *Research objective, design, method and scope*.

The title of this dissertation, namely *The development of a best practice framework for the formulation of overall audit strategies for insurance contracts and the related earnings of listed South African long-term insurers*, should be read against this background. It may create the mistaken impression that its focus is on the wider concept of insurance contracts, rather than specifically on the policy liabilities that arise under these contracts and the related earnings. The shorter title was decided on purely to improve readability and understandability.

Chapter 1 introduces the South African long-term insurance industry and the related financial reporting and auditing practices and issues. It includes some of the results of the literature review undertaken as part of the research and an overview of the content of each of the remaining chapters of the dissertation.

2. BACKGROUND AND LITERATURE STUDY

2.1 The South African long-term insurance industry

The South African long-term insurance industry comprises one of the largest sectors of the South African economy, having generated a net premium income of R156,8 billion and having had custody of total assets of R822,1 billion for financial year-ends during the 2003 calendar year (FSB, 2004a:26-27). It is an important component of the economy from both a macro and micro-economic perspective, as it controls a substantial portion of institutional investments in the South African economy, and is also the custodian for the savings and retirement moneys of many a citizen of the country.

At 31 March 2004, a total of 78 long-term insurers were registered with the Financial Services Board (FSB, 2004a:26). However, the industry is characterised by the dominance of a small number of large players. This is clear from information extracted from the *Life Insurers' Top League 2002* (Financial Mail, 2003b), which is based on financial information for the 2000 financial years of the respective companies (Table 1-1). This conclusion is supported by more recent information contained in Table 1-2.

Table 1-1: Ranking of South African long-term insurers (2000 financial years)

COMPANY	TOTAL ASSETS		RANKING (ASSETS)		TOTAL NPI		RANKING (NPI)	
	R million	%			R million	%		
Old Mutual	234 051	33	1		28 609	26	1	
Sanlam	161 076	23	2		25 107	22	2	
Liberty Group	69 136	10	3		11 644	10	4	
Momentum	66 867	9	4		16 379	15	3	
Metropolitan	29 492	4	5		7 106	6	5	
Other	153 428	21			23 055	21		
TOTAL	714 050	100			111 900	100		

Key:
NPI = Net Premium Income

Note: Investment Solutions has been excluded from the table above, as it offers only pure market-linked products and no risk products (deduced from Investment Solutions (2003)).

Comparable information for more recent financial years was not available. However, Table 1-2 below summarises data collected by Ernst & Young from the annual reports for the 2003/2004 financial years of companies in the financial services sector combined with approximately comparable information from the 2004 *Financial Services Board Annual Report* (FSB, 2004a:27). Although this compilation of information is consequently of an estimated nature, Table 1-2 clearly indicates that the relative rankings of the major role-players in the South African long-term insurance industry had not changed significantly from their 2000 financial years as summarised in Table 1-1.

Table 1-2: Ranking of South African long-term insurers (2003/2004 financial years)

COMPANY	TOTAL ASSETS		RANKING (ASSETS)		EV		RANKING (EV)	
	R billion	%			R million	%		
Old Mutual	295,3	36	1		49230	42	1	
Sanlam	196,0	24	2		29662	25	2	
Liberty Group	96,5	11	4		15816	13	3	
Momentum	100,0	12	3		9666	8	4	
Metropolitan	37,1	5	5		7550	7	5	
Other	97,2	12			6265	5		
TOTAL	822,1	100			118189	100		

Key:

EV = Embedded Value (refer to Section 2.2.2: *Preliminary identification of potential high-risk "industry-specific" elements in the financial statements of South African long-term insurers*)

(Sources: Ernst & Young, 2004b and FSB, 2004a:27)

The sheer magnitude of the industry is clear from the total assets in Tables 1-1 and 1-2 and the net premium income in Table 1-1. It is also demonstrated by the total of R153,1 billion paid in policy benefits for financial year-ends during the 2003 calendar year (FSB, 2004a:26).

Notwithstanding its size, the industry, like most others, is currently affected by relatively slow economic growth in South Africa and the resultant pressure on the disposable income of individuals, as well as volatility in the investment markets (Finansies & Tegniek, 2001:6) and the South African currency. Of particular importance in this regard is the impact of HIV/AIDS on the industry, as elaborated on in Section 2.3.7: *Impact of HIV/AIDS*.

A scrutiny of the financial statements of listed South African long-term insurers clearly indicates that the industry sells permutations and combinations of insurance-related products of all the major product types, namely:

- conventional non-participating business;
- conventional participating (profit-sharing) business;
- non-participating annuities;
- participating (profit-sharing) annuities; and
- various types of investment-linked business, including guaranteed products.

A comparison by Basson (2004a:15) of the extent of risk products currently on the books of Old Mutual Plc, Sanlam Ltd, Liberty Group Ltd and Momentum Life Ltd indicated that, with the exception of Momentum Life Ltd, risk products comprise in excess of 66% of the total policy liabilities of each of these companies. The comparable figure for Momentum Life Ltd is 50%. These findings indicate that large South African long-term insurers currently have significant quantities of both risk and investment products in their portfolios.

Research by Barnard Jacobs Mellet Securities (Pty) Ltd indicates that they expect retail inflows into unit trusts to increase significantly during the period to 2012, at the expense of retail investments in life insurance products where costs are currently perceived to be high and transparency limited. They do, however, expect recent large investment outflows experienced by South African long-term insurers to turn around in the near future (Barnard Jacobs Mellet Securities (Pty) Ltd, 2003:1). These trends are indicative of a mature, low-growth long-term insurance industry in South Africa (supported by Cranston (2004:70)).

The South African long-term insurance industry is currently commonly believed to be at an important crossroads in its existence. Basson published an article in *Finansies & Tegniek* in December 2004 (Basson, 2004b), expressing grave concerns mainly about high cost structures (also refer to Basson, 2005) and incomplete disclosure by South African long-term insurers to policyholders, often resulting in unexpectedly low surrender values of their policies. It should be noted that concerns are not with the

traditional risk products of long-term insurers (e.g. life and disability insurance), but with investment or savings products and hybrids of the abovementioned two product types (Finansies & Tegniek, 2005a; Harris, 2004:48).

It should be recognised that the importance of cost management by long-term insurers is by no means a new concept. Research by Von Wielligh (1994:107) indicated that 40% of the respondents in his study who implemented Activity Based Costing as long ago as 1994, experienced improved profitability as a result of improved cost management.

Basson's abovementioned article sparked heated debates in the media (Basson, 2004c). While creating pressure on the existing products and practices of South African long-term insurers (which may result in pressure on surrender values and, consequently, earnings), it also creates opportunities for insurers to develop innovative new products offering good value to the market (Laschinger, 2005:55).

The demutualisation and subsequent listing of the two largest South African long-term insurers, Sanlam Ltd and Old Mutual Plc, in the late 1990s, sparked renewed interest in the financial statements of these groups. Whereas mainly policyholders previously used their annual reports, current and prospective shareholders now also rely on these reports to make investment decisions.

A similar situation occurred in New Zealand during the early 1990s, resulting in "corporate reporting in the international life insurance industry ... [being] ... acknowledged to be an important public issue in view of the additional information requirements emanating from the demutualization proposals of mutual life insurers" (Adams, 1996:719).

In addition, Bloom (2001) states that the presentation of results by South African long-term insurers has come under scrutiny over the past decade due to investors increasingly wanting to invest in focused long-term insurance operations as opposed to investment trusts.

As a result, auditors face increased reliance on their audit opinions on the financial statements of South African long-term insurers and should consequently ensure, more so than ever before, that they perform efficient and effective audits on these financial statements.

Regulatory scrutiny of the South African long-term insurance industry has increased since the promulgation of the Long-Term Insurance Act No. 52 of 1998 (South Africa, 1998a) and the Inspection of Financial Institutions Act No. 80 of 1998 (South Africa, 1998b). A well-known example is the inspection of certain financial affairs of Fedsure Life after its takeover by the Investec Group during 2002. The inspection was ordered as the Financial Services Board believed that the truth regarding the company and transaction should be disclosed to “affected policyholders and pension fund members [who] were ordinary people who could not understand what went wrong with their life savings” (FSB, 2003:4). The report also sends a clear message to the auditors of South African long-term insurers, who play an important role in the protection of the public interest, by stating that “[t]hey must appreciate that, like the regulator, they may be held accountable publicly” (FSB, 2003:4).

The importance of proper auditing practices for South African long-term insurers is also highlighted by the specific inclusion of the insurance industry in the ambit of the recommendations contained in the King Report on Corporate Governance for South Africa 2002 (King II Report) (IoD, 2002:21). This report recommends, *inter alia*, that regulators, specifically including the Financial Services Board, should ensure the rigorous enforcement of good corporate governance principles, which include sound and reliable auditing practices (IoD, 2002:42).

2.2 Financial reporting

2.2.1 Background

The South African long-term insurance industry is regulated by the Long-Term Insurance Act No. 52 of 1998 (South Africa, 1998a) (previously the Insurance Act No. 27 of 1943 (South Africa, 1943)), which contains certain disclosure requirements. Further disclosure requirements are contained in various Statements of Generally

Accepted Accounting Practice, notably AC 121: *Disclosure in the financial statements of long term insurers* (AC 121) (withdrawn for financial periods commencing on or after 1 January 2005) and IFRS 4 (AC 141): *Insurance contracts*, issued by the South African Institute of Chartered Accountants (SAICA) in February 1994 and August 2004 respectively (SAICA, 1994 and 2004b). Professional Guidance Notes 103 (ASSA, 2002), 104 (ASSA, 2001b) and 107 (ASSA, 2001a), issued by the Actuarial Society of South Africa, contain disclosure requirements relating to certain actuarial issues that require disclosure in the annual report of a long-term insurer. Professional Guidance Note 104 (ASSA, 2001b) currently provides guidance on the measurement of policy liabilities arising under insurance contracts.

In addition, the disclosure requirements contained in the Companies Act No. 61 of 1973 (South Africa, 1973) also apply to all South African long-term insurers, whereas disclosure requirements contained in the Listings Requirements of the JSE Securities Exchange South Africa apply to all listed South African long-term insurers.

As discussed in detail later in this section, the International Accounting Standards Board (IASB) has not completed its project to provide authoritative financial reporting guidance on long-term insurance. As a result, no amendments had been made to AC 121 since it was first issued in 1994. Lately, the industry has generally been in agreement that the requirements of AC 121 fall far short of the increased demands for disclosure by local and international users of financial statements as discussed above. As a result, SAICA decided to withdraw AC 121 for financial periods commencing on or after 1 January 2005 (Anon., 2004:37).

In this regard, the South African situation is by no means different from the situation in some major economies. Table 1-3 contains a summary of financial reporting guidance for long-term insurers in some of the major economies of the world. Canada is excluded from this comparison, as the Canadian Institute of Chartered Accountants is currently revising its equivalent financial reporting standards (CICA, 2003), including AcG-8: *Actuarial liabilities of life insurance enterprises – disclosure* (CICA, 1997a) and AcG-9: *Financial reporting by life insurance enterprises* (CICA, 1997b), both issued in 1997.

Table 1-3: Summary of financial reporting guidance issued in Australia, New Zealand, the UK and the USA as at 28 February 2005

ISSUER	TITLE	YEAR OF ISSUE*
<u>Australia</u>		
AASB (Australian Accounting Standards Board)	AASB 1038: <i>Life insurance business</i>	1998
<u>New Zealand</u>		
ICANZ (Institute of Chartered Accountants of New Zealand)	Financial Reporting Standard No. 34: <i>Life insurance business</i>	1998a
ICANZ (Institute of Chartered Accountants of New Zealand)	Financial Reporting Standard No. 35: <i>Financial reporting of insurance activities</i>	1999
<u>United Kingdom</u>		
ABI (Association of British Insurers)	<i>ABI statement of recommended practice on accounting for insurance business</i>	2003
<u>United States of America</u>		
FASB (Financial Accounting Standards Board)	FAS 60: <i>Accounting and reporting by insurance enterprises</i>	1982
FASB (Financial Accounting Standards Board)	FAS 97: <i>Accounting and reporting by insurance enterprises for certain long-duration contracts and for realized gains and losses from the sale of investments</i>	1987
FASB (Financial Accounting Standards Board)	FAS 120: <i>Accounting and reporting by insurance enterprises for certain long-duration participating contracts</i>	1995

* Where relevant, the letter following the year in this column correlates to the related reference in the source list at the end of the dissertation.

It is clear from this information that the United States of America has not updated its accounting standards applicable to long-term insurers for a number of years, rendering the guidance contained therein out of date with current information requirements.

Accounting standard setters in Australia, New Zealand and the United Kingdom, however, have issued more recent guidance in this regard, ranging from the years 1998 to 2003.

Developing uniform, internationally accepted financial reporting guidance for the long-term insurance industry is described by Arthur (2005:29) as a “decades-old challenge”. The IASB recognised the significance of the lack of international guidance on financial reporting by long-term insurers and issued a lengthy issues

paper in November 1999, putting forward a number of radical proposals (Wright, Aaron & Kunesh, 2000:26). The issues paper met with considerable opposition, which was subsequently discussed, resulting in the issue of a Draft Statement of Principles (DSOP) on Insurance Contracts in June 2001 for informal consultation (Patel, 2001:105). The DSOP is still under discussion and changes are being made and released for comment as discussions progress. The project has been divided into two phases, the first of which has resulted in International Financial Reporting Standard 4: *Insurance contracts* (IASB, 2004b) (IFRS 4) being issued by the IASB in 2004, effective for financial periods commencing on or after 1 January 2005.

IFRS 4 (IASB, 2004b) provides very limited guidance on accounting practices for insurance contracts and is intended to serve as a stepping stone to the second and final phase of the project. As such, it does not resolve the lack of international financial reporting guidance for long-term insurers previously referred to.

The final phase of the IASB's insurance reporting project requires the resolution of a number of significant unresolved issues in the DSOP relating to, *inter alia*, the use of fair value for the measurement of financial assets and liabilities. In the words of Sir David Tweedie, chairman of the IASB, in October 2001: "It will take three to five years before an international standard for financial instruments is brought in" (Anon., 2001:10). Complete, authoritative international financial reporting guidance for long-term insurers cannot be finalised before the issues surrounding the measurement of financial instruments are resolved. In fact, some commentators on this area are of the opinion that the "broader issues concerning the use of 'fair value' accounting" by financial institutions will require further resolution even after the finalisation of the IASB's guidance on the measurement of financial assets and liabilities in general (Smartpros Editorial Staff, 2004).

The time line for the completion of the second and final phase of the IASB's insurance reporting project is uncertain, but Arthur (2005:29) believes that a final standard might be promulgated by mid-2008 with an extended implementation period, resulting in full implementation being unlikely before 2009 or 2010. The IASB has established a working group to drive this project (Lymer, 2004 and Arthur, 2005:27).

SAICA is closely monitoring the activities of the IASB in respect of guidance on financial reporting by long-term insurers. In line with the verbatim adoption of all International Financial Reporting Standards in South Africa and their dual numbering system, it has issued IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b) as a local accounting standard. It has also issued guidance on the application of the local equivalent of IAS 39: *Financial instruments: recognition and measurement* to policy liabilities arising under long-term insurance contracts (SAICA, 2003).

West (1999) evaluated the extent of compliance by South African long-term insurers with local and international disclosure requirements over the period 1993 to 1997. He concluded that, although the level of compliance with local requirements was adequate (78%), the extent and adequacy of compliance with selected international requirements were inadequate (West, 1999:61). He also found no clear evidence of the nature and extent of disclosure by South African long-term insurers for the selected period being influenced by the selected international requirements. He speculated that any disclosures in excess of the local requirements provided by the companies selected were a function of the discretion of the particular companies rather than of attention to international influences (West, 1999:63).

Until such time as the final phase of the abovementioned IASB project is completed and its results have been accepted by local standard setters, South African long-term insurers will most probably continue to select what they believe to be appropriate from trends in and guidance on financial reporting available in other countries.

The lack of authoritative South African guidance on financial reporting by long-term insurers results in the basic qualitative characteristics of **comparability** and **relevance** in their financial statements possibly being compromised due to certain disclosures being voluntary rather than required (Von Wielligh, 2003). It should, however, be noted that a number of items typically included in the financial statements of long-term insurers are already covered by existing South African

Statements of Generally Accepted Accounting Practice (SA GAAP Statements). Sufficient and appropriate financial reporting guidance therefore already exists in these areas, which include:

- investments;
- property, plant and equipment;
- long-term liabilities other than liabilities to policyholders arising under insurance contracts;
- investment income;
- deferred tax; and
- retirement benefits.

It follows that the items not covered by existing SA GAAP Statements are those areas where accounting policies and practices can vary significantly amongst South African long-term insurers. These are typically the areas where these companies follow one or a combination of:

- the outdated guidance available in AC 121 (SAICA, 1994) (recently withdrawn);
- the very limited guidance available in IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b); and
- a selection of international standards, examples or so-called “best practices” from various other countries, deemed appropriate for the particular company by the preparers of its financial statements.

The latter practice, in particular, appears to be commendable, as it appears to bring financial reporting by South African long-term insurers in line with that of the rest of the “global village”. On closer examination, however, it results in different South African companies following often vastly different accounting policies and practices, often compromising comparability and relevance of financial information. This disparity is exacerbated by the fact that the financial reporting models followed by long-term insurers around the world are “fundamentally different” (Arthur, 2005:29).

This phenomenon is clearly demonstrated by a comparison of actuarial methods of profit reporting by long-term insurers around the world (Table 1-4).

Table 1-4: Methods of profit reporting by long-term insurers

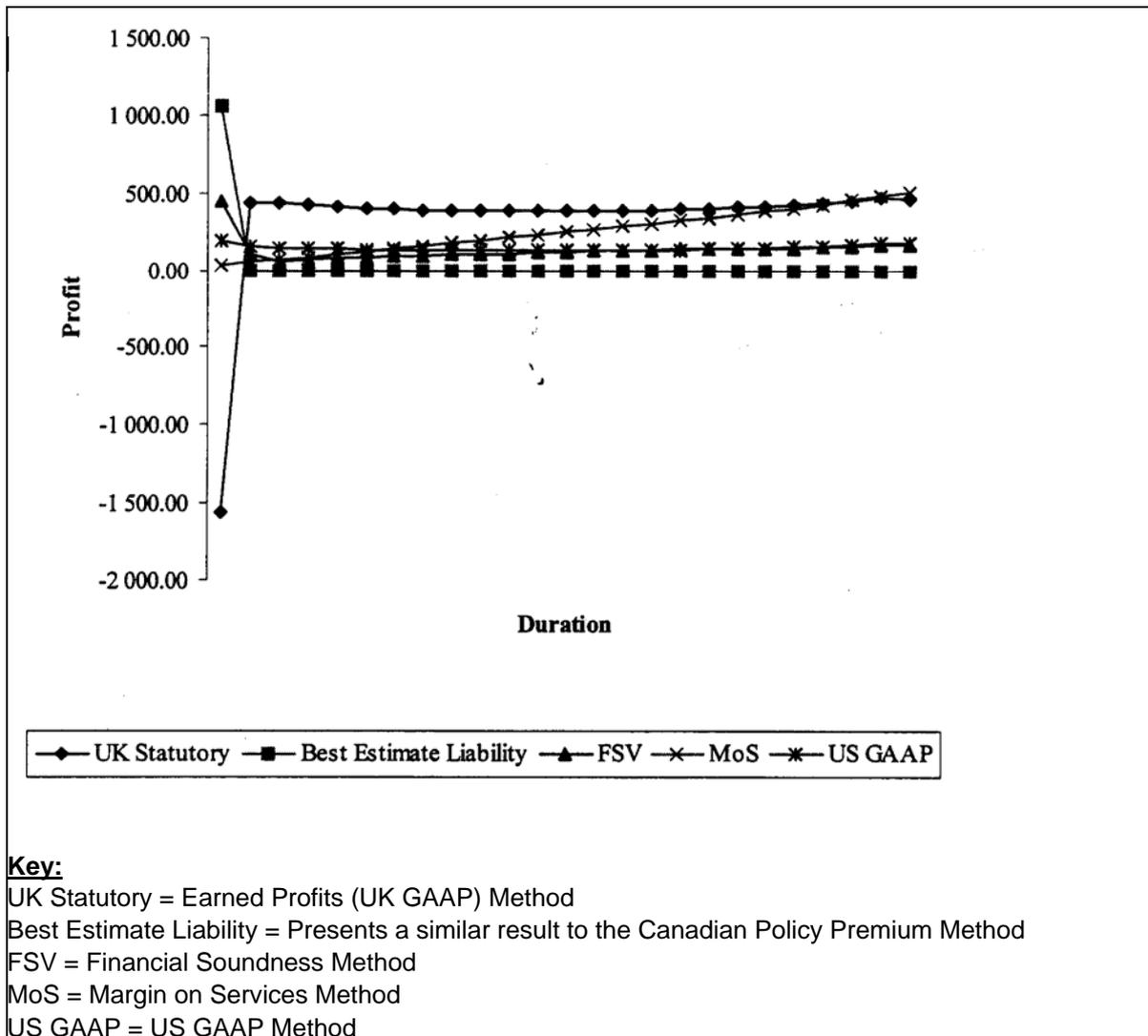
COUNTRY	METHOD
South Africa	Financial Soundness Method
Australia	Margin on Services Method
Canada	Policy Premium Method
United Kingdom	Earned Profits (UK GAAP) Method
United States of America	US GAAP Method

(Source: Waugh, 2000:10, adapted)

Depending on which of the methods in Table 1-4 an insurer selects for financial reporting, a different figure for earnings from long-term insurance business will emerge in a particular financial year for the same insurance policy. Detailed discussions of the differences between the profit reporting methods in Table 1-4 fall outside the scope of this research.

Figure 1-1 has nevertheless been included to graphically illustrate the differences in profit reported over the duration of an insurance contract (an endowment policy with life cover) with a relatively high profit margin using each of the different methods.

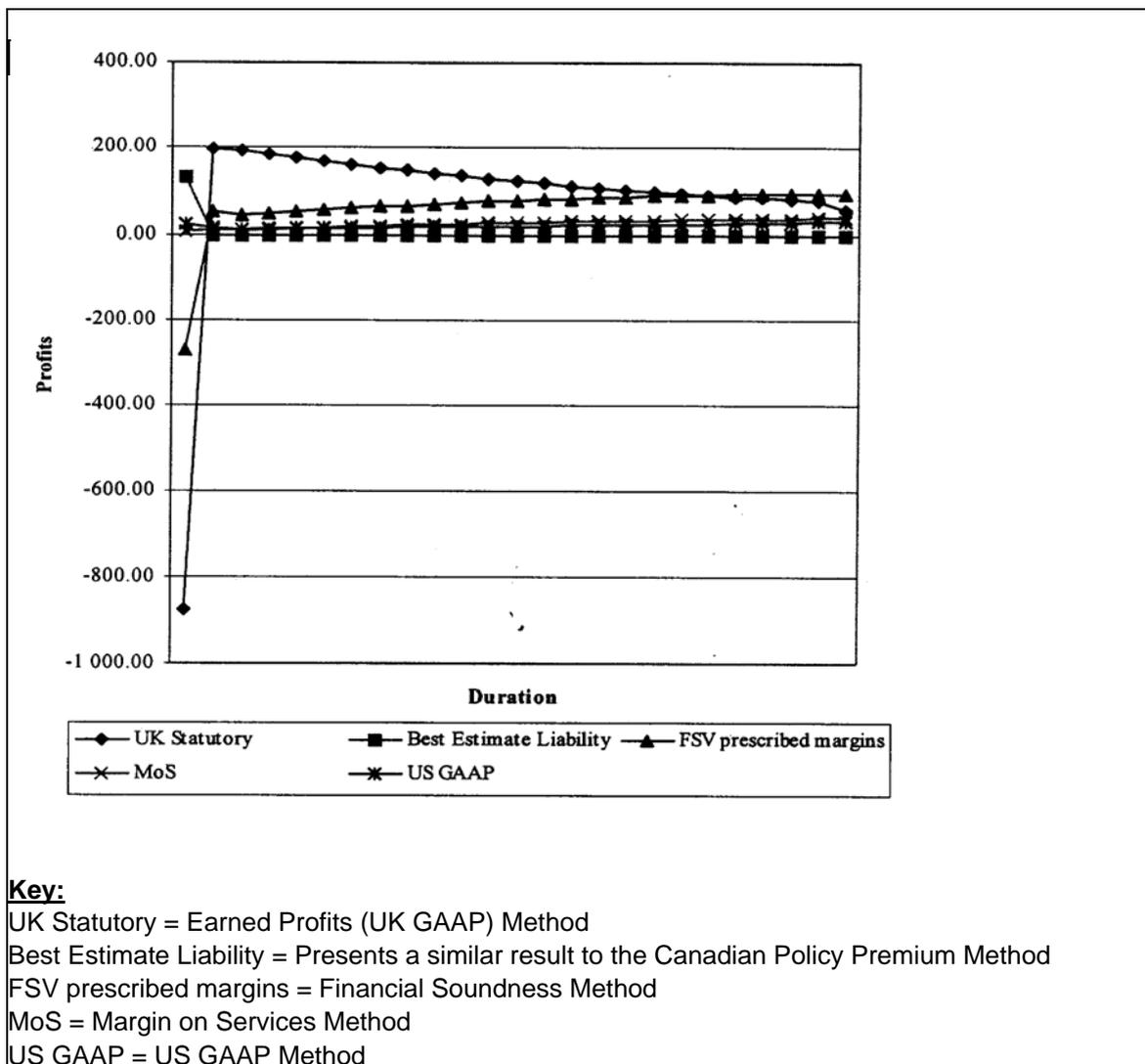
Figure 1-1: Differences in profit reporting over time: high profit margin contract



(Source: Waugh, 2000:18, adapted)

Figure 1-2 provides a graphic illustration of an insurance contract similar to the one in Figure 1-1, but with a relatively low profit margin.

Figure 1-2: Differences in profit reporting over time: low profit margin contract



(Source: Waugh, 2000:19, adapted)

It is clear from Figures 1-1 and 1-2 that, although the same total profit is recognised over the duration of the insurance contract under all the different methods of profit reporting, significant differences arise in the profit reported in each discrete financial year over the duration of the contract for both high and low-margin contracts.

Another factor contributing to disparity in the financial reporting practices of South African long-term insurers is the fact that Old Mutual Plc, South Africa's largest long-term insurer, has its primary listing on the London Stock Exchange. As such, it follows the United Kingdom financial reporting guidance in its annual report. As this guidance is vastly different in some important respects to the practices currently

followed by other South African long-term insurers, this issue contributes to disparity in local financial reporting practices.

The use of different accounting policies and practices by South African long-term insurers also potentially compromises the **understandability** of their financial statements. Over time, users become accustomed to financial information being presented in a particular way by the majority of companies in a particular industry, resulting in improved understandability. This important qualitative characteristic of understandability is lost, however, if companies in the same industry present what should be similar financial information in vastly different ways, as is currently the case in the South African long-term insurance industry, as a result of the lack of relevant South African guidance.

2.2.2 Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers

A review of the accounting guidance on long-term insurance business in the United Kingdom (ABI, 2003), Australia (AASB, 1998), New Zealand (ICANZ, 1998a and 1999) and the United States of America (FASB, 1982, 1987 and 1995) indicates that international guidance provides specific guidance on accounting for and disclosure of certain account balances, classes of transactions and other elements of financial statements. Canadian guidance has again been excluded from this review, as standard setters are currently revising local guidance in line with international guidance (CICA, 2003).

It follows that these areas are internationally considered to be “industry-specific” to the long-term insurance industry. These include the following main items:

- premiums and claims (policy benefits);
- reinsurance;
- investment revenues (income and realised and unrealised gains and losses);
- policy liabilities, including participating benefits;
- assets (investments);
- income tax; and

- commission and other new business costs or acquisition costs, and the deferral thereof.

Industry-specific areas in the financial statements of South African long-term insurers that are not comprehensively covered by existing SA GAAP Statements and that are therefore potentially subject to inconsistent financial reporting practices across the industry, resulting in these possibly being high-risk areas from an auditing point of view based on this criterion (further discussed in Section 2.3: *Audit issues* and in Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers*), include:

- liabilities to policyholders arising under unmatured insurance contracts (policy liabilities); and
- earnings (attributable to shareholders) from long-term insurance activities (as opposed to other financial services income and expenses covered by existing SA GAAP Statements) (Von Wielligh, 2001a:9).

Two major categories of users of the financial statements of long-term insurers are policyholders and shareholders. **Policyholders** are generally interested in certainty about the security of their policy benefits (future claims), which are reflected in policy liabilities. **Shareholders**, on the other hand, are interested in a sound return on their investment (dividends and capital growth), reflected in the total earnings (including earnings from long-term insurance activities) of the insurer. The influences of these stakeholders on the business underline the importance of the fair presentation of the abovementioned areas in the financial statements, to both users and auditors.

Consequently, based solely on existing international and local financial reporting guidance and information important to the users of financial statements, it appears as though (1) policy liabilities arising under insurance contracts and (2) earnings from long-term insurance activities are items in the financial statements of listed South-African long-term insurers potentially exposed to a high level of audit risk. However, as audit risk is also affected by a number of other indicators, this preliminary hypothesis is further developed and investigated in Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers*.

The focus of this research is on these two areas of the financial statements of listed South African long-term insurers. The objective, design, method and scope of the research are discussed in more detail in Chapter 2: *Research objective, design, method and scope*.

Some South African long-term insurers have in recent years started publishing embedded values and the value of new business in their annual reports, based on best practices set out in Professional Guidance Note 107: *Embedded values and value of new business* (ASSA, 2001a) (PGN 107) issued by the Actuarial Society of South Africa. These values are often regarded as the driver of shareholder value in a long-term insurer. On the basis of the argument followed above for the identification of industry-specific elements of financial statements, it can conceivably be argued that the measurement and disclosure of embedded values and value of new business should also be regarded as industry-specific elements of financial statements potentially exposed to a high level of audit risk.

However, PGN 107 (ASSA, 2001a) does not require the publication of these values. It only applies where insurers elect to publish the values. Furthermore, no requirement exists in the South African context for an audit opinion on these values. As a result, insurers that do publish them do so outside the areas of the annual report covered by the audit report on the annual financial statements. On this basis, these disclosures are excluded from the scope of this research, as they are not necessarily common elements of the financial statements of all listed South African long-term insurers, and are also not necessarily exposed to audit risk, as they are not required to be audited.

2.3 Audit issues

SAICA issued the *Audit Guide on Long-Term Insurance* (SAICA, 1998a) and the guide entitled *The Auditor's Relationship with the Statutory Actuary in the Long-Term Insurance Industry* (SAICA, 1998b) in 1998. They were, however, issued before the abovementioned demutualisations, listings and the promulgation of IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b), resulting in a requirement for

the substantial revision of the guides². The existing guidance states that “[t]he auditor’s primary objective is to express an opinion on the financial statements of the long-term insurer” (SAICA, 1998a:1).

In the process of gathering the required audit evidence to enable the auditor to express this opinion, a number of important issues are encountered by South African auditors, including the following:

- A lack of South African financial reporting guidance.
- Complexity of accounting for and presentation of long-term insurance activities.
- Complexity of the actuarial valuation process.
- Application of the concept of materiality in the audits of financial statements of South African long-term insurers.
- Availability of sufficient appropriate audit evidence regarding liabilities arising under insurance contracts and related account balances and classes of transactions.
- Going concern risk.
- The impact of HIV/AIDS.

The abovementioned audit issues are discussed in more detail in the following sections.

2.3.1 Lack of South African financial reporting guidance

The lack of SA GAAP Statements and other guidance relating to financial reporting of policy liabilities arising under insurance contracts and earnings from long-term insurance activities places the auditor of a South African long-term insurer in a difficult predicament. This predicament is the result of the non-existence of a framework within which to form the audit opinion.

² The Long-Term Insurance Interest Group of SAICA has approved a project to extensively revise the existing guides based on the findings of this research (refer to Chapter 2, Section 2: *Research objective and value*).

The objective of an audit of financial statements is “to enable the auditor to express an opinion whether the financial statements are prepared, in all material respects, **in accordance with an identified financial reporting framework**” (emphasis added) (IAASB, 2005g:para. 2). Boynton, Johnson and Kell (2001:4) describe the essence of auditing as “a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and **established criteria** and communicating the results to interested users” (emphasis added). The abovementioned description of Boynton, *et al.* is supported by various other authoritative authors, including Whittington and Pany (2004:2) and Puttick and Van Esch (2003:26).

It can be concluded from the above that, in order for an auditor to be able to express an opinion on whether the financial statements of a long-term insurer fairly present the financial position (reflected in the balance sheet) and results of operations (reflected in the income statement), at least one of the following elements has to be available:

- an identified financial reporting framework; or
- established criteria for financial reporting.

As discussed earlier in this chapter, neither of these exists in a comprehensive form in the South African environment. Admittedly, as explained in Section 2.2.1: *Background*, limited international guidance and examples exist, but this alone does not create the robust framework required for the performance of a proper audit in the South African context.

Notwithstanding this significant shortcoming, regulators and other users alike require auditors to express audit opinions on “fair presentation” in the financial statements of South African long-term insurers while performing their audits in accordance with the prevailing auditing standards. “Fair presentation” becomes difficult, if not impossible, for the auditor to define if no financial reporting framework exists as a frame of reference.

Furthermore, Adams (1996:723) suggests that, to cope with uncertainty (including uncertainty regarding financial reporting), companies will rely on professional specialists (including accountants and auditors) for assistance (including advice regarding accounting and disclosure).

Both these factors result in a significant predicament for the auditor of a South African long-term insurer:

- (S)he is placed in a situation where various parties representing the public interest rely heavily on his/her audit opinion. The spotlight on the audit opinion inevitably increases the risk of claims by clients and third parties (including investors and policyholders) against auditors for negligence (also refer to the Fedsure Life example in Section 2.1: *The South African long-term insurance industry*).
- Furthermore, the reliance by long-term insurers on the auditor's financial reporting expertise in the absence of relevant SA GAAP Statements increases the risk of claims against auditors by their clients, claiming that they had received unsound financial reporting information, affecting the investment rating of the company as based, *inter alia*, on the quality of its financial reporting.

2.3.2 *Complexity of accounting for and presentation of long-term insurance activities*

Policy liabilities arising under insurance contracts and earnings from long-term insurance activities were briefly highlighted in Section 2.2.2: *Preliminary identification of potential high-risk "industry-specific" elements in the financial statements of South African long-term insurers*, as potential high-risk areas due to, *inter alia*, the lack of SA GAAP Statements applicable to them. To understand the significance of these items from an auditing perspective, a clear understanding of accounting for, the presentation of and the relationship between these areas is imperative.

Even a cursory glance at the financial statements of a long-term insurer highlights the fact that presentation and disclosure here are fundamentally different from that in any other type of business. One of the reasons for the differences is the fact that the financial statements in essence combine the financial statements of shareholders with those of policyholders in one set of financial statements (Von Wielligh, 2001d).

The shareholders earn their profits or earnings from the carrying on of different types of long-term insurance business (depending on the nature of the different insurance products sold by the insurer) between the insurer and the policyholder. The earnings of a long-term insurer arise from many sources, including:

- future mortality or morbidity experience (i.e. actual future occurrences of death and disability) being less than that assumed by the actuary at the time of the valuation of policy liabilities;
- future expenses or lapses and surrenders being less than assumed; and
- investment income earned being in excess of that assumed in the setting of premium rates (Diacon & Carter, 2002:212).

The phenomenon of earnings arising as a result of actual experience differing from assumptions can be demonstrated by a largely simplified example. For many simple typical risk products (as opposed to investment products), profits are earned by shareholders as a result of the actual experience of the insurer differing from previously assumed experience. Assume that a policyholder holds a life insurance policy that will pay out a fixed amount upon death, and pays monthly premiums on the policy. On the basis of age and other factors the insurer will make an assumption as to the policyholder's life expectancy and, by inference, his expected date of death. Risk premium rates will be set at a level that will ensure that the funds required to provide the policy benefit at the **assumed** date of death of the policyholder are available at that date.

The policyholder then dies later than was assumed, resulting in the receipt of risk premiums from the policyholder for a longer period than was assumed. The premiums for the period after the originally assumed date of death are not required by the insurer to enable it to pay the contracted policy benefit to the policyholder when it eventually becomes due. Premiums up to the assumed date of death have been set aside for this purpose. The "unnecessary" premiums can therefore be released to shareholders as profit.

In this example, the assets that back the policy liability (representing premiums received by the insurer up to the originally assumed date of death), are essentially those of the policyholder, and should therefore appear on his "balance sheet". The

shareholders earn no risk profit (i.e. risk premium income less risk policy benefit expenses) from these premiums. The premiums received subsequently do not belong to the policyholder, however, and should be recognised as profit in the income statement of the shareholders and invested in assets representing shareholders' interests. This clearly demonstrates the duality in the financial statements of long-term insurers: they combine the interests of shareholders and policyholders.

Policy liabilities arising under insurance contracts are by their nature one of the largest line items on the balance sheet of a long-term insurer. The earnings from long-term insurance activities are directly related to movements in the policy liabilities.

Policy liabilities are essentially calculated by discounting expected future cash flows resulting from insurance contracts at a particular discount rate (a proxy for the result of this calculation can be used to simplify the valuation process). The expected future cash flows and discount rate are based on the insurer's assumptions about, for example, future mortality rates, interest rates and inflation rates. When the assumptions change, policy liabilities change concomitantly. The fair values of the investment assets backing the policy liabilities do not, however, necessarily change to the same extent, as these are determined by the investment markets. The movement in the net assets (assets less liabilities) of the insurer from one financial year to the next as a result of a change in assumptions therefore also results in profits or losses (known as a "surplus" (Diacon & Carter, 2002:212)) for shareholders.

It is clear even from this highly simplified example that accounting for and presentation of long-term insurance activities in the financial statements of long-term insurers are very complex issues. Practice Note 20: *The audit of insurers in the United Kingdom*, confirms this complexity by stating that a significant element of insurers' accounting processes is driven by a complex assessment of probable outcomes of liabilities under insurance contracts. This principle is fundamentally different from other industries, where accounting processes support the occurrence of events or transactions (such as purchases or sales of goods) (APB, 1999:para. 12).

The auditor of a long-term insurer therefore requires a sound knowledge of the economy and industry, as well as the specific business of the insurer (including product types and characteristics) and actuarial issues, to be in a position to properly assess and consequently address the audit risks related to the financial statements of a long-term insurer. This conclusion is supported by the *SAICA Audit Guide on Long-Term Insurance* (SAICA, 1998a:1), which states that auditors should undertake audits of long-term insurers only after careful consideration of their own competence. Auditors of long-term insurers should have a proper understanding of, *inter alia*, the accounting methods peculiar to long-term insurance business.

The exclusion of accounting and auditing guidance specific to long-term insurers from the syllabi of SAICA and the Public Accountants' and Auditors' Board (PAAB) for Part I of the Qualifying Examination and the Public Practice Examination respectively due to the specialised nature of the industry, exacerbates the challenge for South African auditors to truly understand accounting for and presentation of long-term insurance activities (also refer to Chapter 6, Section 6.2.1: *Lack of experience of audit staff and complexity of actuarial valuation process*).

2.3.3 Complexity of the actuarial valuation process

Prior to the introduction by the PAAB in 1998 of SAAS 620: *Using the work of an expert* (SAAS 620) (PAAB, 1998) (recently superseded by ISA 620: *Using the work of an expert* (IAASB, 2005)), which contains no differences in principle from SAAS 620), auditors of South African long-term insurers could rightfully exclude from their audit opinions on the financial statements of these companies an opinion on their policy liabilities and related items (which include earnings from long-term insurance activities) (Von Wielligh, 2001a:8). At the time, this practice was perceived by the users of financial statements to be acceptable, as the statutory actuary of the insurer is required to report on these items.

Since the introduction of SAAS 620, however, auditors of South African long-term insurers are required to express an opinion on the financial statements of the insurer as a whole, including the abovementioned items, notwithstanding the fact that these items are also reported on by the statutory actuary. The auditor now therefore has a

responsibility to perform audit procedures on an area previously regarded as the exclusive domain of the actuary, often perceived to be the unknown “black box” of a long-term insurer.

The actuarial valuation process is an inherently complex mathematical and statistical process that relies heavily on existing source data, complex formulae and actuarial assumptions in respect of future trends in elements such as mortality (death), morbidity (disability), inflation, interest rates and other investment market indicators (Von Wielligh, 2001a:9). In recent years, insurance products have become increasingly complex, resulting in increased complexity in the valuation of the resulting policy liabilities. Actuarial standards have also grown increasingly voluminous, technical and complex (OSFI, 2001:6).

The intricacies and complexities of the actuarial valuation process are generally not well understood outside the actuarial profession (OSFI, 2001:12). Basson (2004d:16) states that actuaries and their technical assistants indeed speak their own language. As a result, many South African auditors lack the knowledge and experience to properly assess and evaluate many aspects of the actuarial valuation process, including but not limited to:

- The appropriateness of actuarial assumptions used in the actuarial valuation process.
- Policyholders' reasonable expectations as regards future policy benefits, and the impact thereof on actuarial assumptions. The impact of the proper disclosure of factors that affect policyholders' reasonable expectations on the valuation of policy liabilities was highlighted by a recent judgement by the Pension Funds Adjudicator against Sanlam. Sanlam was ordered to pay out a value in excess of the actual benefit available on a particular policy at the date of the claim, based on illustrative values previously communicated to the policyholder, which, according to the judgement, created reasonable expectations of the higher value for the policyholder involved. The case is currently on appeal (Basson, 2005).
- The appropriateness of various mathematical and statistical techniques and formulae used by the actuary in calculating policy liabilities.

- The correctness of the application of actuarial models to perform valuation calculations.
- Whether profit entitlement policies (company policies setting out how shareholders earn their profit from long-term insurance activities) are appropriate and consistently applied throughout the financial year of the insurer.
- The appropriateness of the analysis of the sources of the earnings of a long-term insurer.
- The adequacy of presentation and disclosure of actuarial matters in the annual report of a long-term insurer.

The complexity of the actuarial valuation process therefore increases the inherent risk of material error in the balances of policy liabilities and the related earnings from long-term insurance activities. This increase in inherent risk has to be compensated for by the auditor by changing the nature and timing, and/or increasing the extent of the audit procedures in these areas. Actuarial expertise is also often incorporated into the audit process to address this risk. Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* contains a discussion of the findings of the research in this regard.

2.3.4 Materiality

Materiality is an issue of importance to both directors and auditors of a company.

The King II Report recommends that, in fulfilling their responsibilities as directors of a company, which include the responsibility for proper financial reporting to stakeholders³ of the company, the board of directors should define materiality levels (IoD, 2002:22) and, by implication, material items and elements of financial statements. These areas should be their primary focus in discharging their responsibilities. Lubbe (2000:143) emphasises the importance and difficulty of this process, which involves understanding the stakeholders of the company and their

³ The identification and management of all important stakeholders (as opposed to only shareholders) and their impact on the company have arisen as important issues in corporate governance (Marx, Van der Watt, Bourne & Hamel, 2004: 4-3). No attempt is made in this research to identify all the stakeholders of a listed South African long-term insurer. The users of financial statements identified in this section are consequently only examples of such stakeholders.

(often widely diversified and even opposing) information requirements and the application of professional judgement.

In forming and expressing the audit opinion, the auditor is also concerned only with “material” items. The concept of materiality is a matter of professional judgement, and is described by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) as follows: “Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. Materiality depends on the size of the item ... judged in the particular circumstances of its omission or misstatement” (IAASB, 2004a:12).

Application of this definition by the auditor requires a consideration of (1) the size of the item (quantitative considerations) and (2) the particular circumstances of the company being audited (qualitative considerations), including the users of its financial statements (Marx, *et al.*, 2004:8-22; Boynton, *et al.*, 2001:286; Puttick & Van Esch, 2003:136; Whittington & Pany, 2004:184 and Knechel, 2001:331).

Some of the major classes of users of the financial statements of long-term insurers are discussed in Section 2.2.2: *Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers*. Policy liabilities represent the interest of policyholders in the company and, as such, are important to policyholders as users of financial statements.

In the case of a long-term insurer, as referred to in Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*, policy liabilities are always **quantitatively** material. Furthermore, as a result of the complexity and subjectivity involved in the valuation of policy liabilities as described in the abovementioned section and the resultant susceptibility to error, policy liabilities are always **qualitatively** material. In particular, the following factors result in policy liabilities being exposed to a high risk of material misstatement:

- The valuation of policy liabilities is based on assumptions made by the management of the insurer.

- Complex mathematical and statistical calculations are involved in the valuation process.

In addition to this important area therefore requiring the focus of the directors, the auditor should perform sufficient audit procedures to collect extensive audit evidence in order to reduce the audit risk of all assertions related to policy liabilities to an acceptable level. This conclusion is supported by AuG-15: *Audit of actuarial liabilities of life insurance enterprises*, which states that the determination of actuarial liabilities will usually involve high inherent risk (CICA, 1993:para. 3).

If policy liabilities are material, consideration needs to be given to whether earnings from long-term insurance activities are consequently material.

Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities* describes the complex relationship between policy liabilities and earnings from long-term insurance activities. The earnings from long-term insurance activities may not always be **quantitatively** material, depending on how profitable the insurer is. However, as movements in policy liabilities often impact directly on earnings from long-term insurance activities, these earnings are subject to the same qualitative characteristics as policy liabilities, rendering them **qualitatively** material.

Analysts as users of financial statements value companies in most sectors of the JSE Securities Exchange South Africa by applying a price/earnings ratio to the earnings of the company. However, for the valuation of a long-term insurer it has become common practice around the world for analysts to place more reliance on the so-called “embedded value” and “value of new business” nowadays published by most listed South African long-term insurers (Waugh, 2000:1), and less emphasis on earnings-based valuation methods (also refer to Section 2.2.2: *Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers*). The interests of analysts as a group of users of the financial statements of long-term insurers therefore are not considered to necessarily render total earnings and, by implication, earnings from long-term insurance activities, material.

Shareholders, however, are interested in the best possible return on their investment in the shares of a long-term insurer. Both elements of this return, namely dividend income and capital growth, are directly related to the profit of the company. Shareholders as users of financial statements therefore have a strong interest in the fair presentation of the earnings from long-term insurance activities, resulting in this item being **qualitatively** material to all listed long-term insurers.

In conclusion, policy liabilities and earnings from long-term insurance activities should be regarded as material items by directors of long-term insurers in discharging their corporate governance and other responsibilities as well as by auditors in the audits of listed South African long-term insurers. Sufficient appropriate audit evidence regarding these items therefore should be collected by the auditor in order to maintain audit risk at an acceptable level.

Another important issue related to materiality encountered by the auditors of long-term insurers results from the fact that existing auditing standards and guidance locally and internationally does not provide specific guidance for the basis (or financial statement component) upon which materiality should be based. As a result, materiality remains a vague concept to the auditing profession (Knechel, 2001:329). However, Discussion Paper 6: *Audit risk and materiality* (SAICA, 1984) (DP 6) issued by the Auditing Standards Committee of SAICA in July 1984 and subsequently withdrawn, is still regarded today as a useful guideline in practice. DP 6 suggested that materiality may be based on specific income statement figures (gross revenue, gross profit and net profit) or balance sheet figures (total assets and shareholders' equity) (SAICA, 1984:para. 106). A recent international exposure draft entitled *Proposed International Standard on Auditing 320 (revised) - materiality in the identification and evaluation of misstatements* issued by the IAASB generally supports the abovementioned bases (IAASB, 2004b:para. 13-14).

The fact that the financial statements of a long-term insurer combine the interests, transactions and balances of shareholders and policyholders (refer to Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*) results in the balance sheet containing relatively high balances (a combination of shareholders' and policyholders' assets and liabilities) compared to

the income statement (which includes only the transactions of shareholders). A materiality figure calculated on a balance sheet base (e.g. total assets) will therefore always significantly exceed what should, in a company in most other industries, be a comparable figure calculated on an income statement base (e.g. net profit). DP 6 (SAICA, 1984:para. 32) recommends that the smaller of these numbers should be used as planning materiality. This could result in, for example, disproportionately large sample sizes for substantive tests of the balance sheet items that have much higher balances.

It is clear that the determination of a proper basis (or perhaps bases) for the calculation of materiality is a complex issue of professional judgement for the auditor of a long-term insurer. Best practices in this regard are explored and recommendations made in Chapter 5, Section 5: *Findings relating to materiality*.

2.3.5 *Availability of sufficient appropriate audit evidence*

The auditor of a long-term insurer should obtain sufficient appropriate audit evidence to support the audit opinion on financial statements (refer to IAASB, 2005b:para. 2). Audit evidence comprises source documents and accounting records, as well as corroborating information from other sources (IAASB, 2005b:para. 3). The importance of the availability of audit evidence is demonstrated by the fact that, if sufficient appropriate audit evidence cannot be obtained, the auditor should express a qualified opinion or disclaimer of opinion (IAASB, 2005j:para. 72). The sufficiency and appropriateness of audit evidence is a matter of professional judgement and is influenced by, *inter alia*, the source and reliability of the information available regarding the item being examined (IAASB, 2005j:para. 71).

In the audit of a long-term insurer, audit evidence in the form of documents, accounting records and corroborating information from other sources is generally available for most material components of the financial statements. However, two specific material components are the direct and indirect results respectively of the actuarial valuation process. These are the policy liabilities and the earnings from long-term insurance activities. The available audit evidence for these items is largely restricted to internal documentation resulting from the actuarial valuation process,

comprising, *inter alia*, actuarial and accounting source data in the in-force database (refer to Chapter 5, Section 2.3: *Analysis of audit hours* for a definition of the in-force database) and accounting records, explanations of actuarial assumptions, mathematical formulae and the mathematical results of actuarial calculations. Practice Note 20: *The audit of insurers in the United Kingdom* (APB, 1999:SAS420.9) specifically states that, where a high degree of uncertainty regarding an estimate such as policy liabilities exists, auditors may be concerned about the existence of sufficient audit evidence to support the relevant assertions.

Section 20(1) of the Long-Term Insurance Act No. 52 of 1998 (South Africa, 1998a) requires a long-term insurer to “appoint, and at all times have, an actuary”. An actuary is defined as “a person professionally trained in the mathematical and technical aspects of insurance and related fields...” (SAICA, 1998a:36). The responsibilities of the statutory actuary are described in Chapter 6, Section 3.3: *The statutory actuary*.

Due to its complex and specialised nature, the valuation of policy liabilities is performed by the statutory actuary. Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities* explains the direct relationship between policy liabilities and earnings from long-term insurance activities.

It should be borne in mind that the major professional responsibility of the statutory actuary is “to ensure that the long-term insurance business is operated on a sound financial basis” (SAICA, 1998a:13) and not, in the first instance, to ensure that fair presentation has been achieved in the financial statements of the insurer. This responsibility of the actuary can, to a certain extent, be relied upon by the auditor as audit evidence regarding the **going concern assumption**. On the other hand, however, the difference in focus of the auditor and the statutory actuary potentially results in limited audit evidence being available regarding **fair presentation** in the financial statements of policy liabilities and the resulting earnings from long-term insurance activities other than evidence produced by the statutory actuary as part of the actuarial valuation process. The objective of the latter evidence is one of financial soundness (of importance to the actuary) rather than fair presentation (of importance to the auditor).

In conclusion, the limited availability as well as complexity of sufficient appropriate audit evidence regarding policy liabilities and earnings from long-term insurance activities again indicates that these areas should potentially be regarded by the auditor as high-risk areas.

2.3.6 *Going concern risk*

The importance of long-term insurers as institutional investors and custodians of the savings and retirement moneys of many South African citizens was highlighted in Section 2.1: *The South African long-term insurance industry*. Failure of the business of a long-term insurer can therefore have devastating consequences for vast numbers of individual and corporate South Africans. The Code of Corporate Practices and Conduct contained in the King II Report requires directors (including those of listed long-term insurers) to make a statement in the annual report of the company regarding its going concern status for the twelve months following the report (IoD, 2002:40).

The assessment of the appropriateness of the going concern assumption underlying the financial statements of South African long-term insurers (going concern risk) is also an important element of the assessment of inherent risk as part of the audit of these insurers.

The adequacy of the capital of a long-term insurer is a vital consideration in the assessment of going concern risk (AICPA, 2003:para. 4.03). A strong capital position and sustainable sources of earnings provide the insurer with an increased capacity to accept and manage risk. South African long-term insurers are required to hold certain minimum levels of Capital Adequacy Requirements (CAR) in relation to their business and the adequacy of these levels are monitored by the Financial Services Board. The extent of CAR is disclosed in the financial statements of South African long-term insurers in accordance with Professional Guidance Note 104: *Life offices – financial soundness valuation* (ASSA, 2001b) and are subject to audit.

The complexity of and subjectivity involved in the determination and disclosure of CAR result in audit issues similar to those discussed in preceding sections. The complex actuarial nature of CAR furthermore complicates the use thereof by the auditor in assessing the going concern risk of the insurer.

Exposure to movements in financial markets as a result of the nature of the business of a long-term insurer also potentially exposes the insurer to going concern risk. A recent example is a court case brought by British long-term insurer Equitable Life Assurance Society against former auditor Ernst & Young in the United Kingdom after the near collapse of the insurer in 2000. The latter was the result of a sharp reduction in ruling interest rates from 15% in 1989 to 5,5% in 1993, causing the insurer to be locked in to make high annuity payments on certain policies (based on high interest rates at the time of inception) not supported by the low yields on the underlying investments (Murphy, 2005:18).

Long-term insurers are also exposed to the same going concern risks as companies in many other industries, such as those resulting from natural disasters, tsunamis and the effects of global warming. As the focus of this research is specifically on long-term insurance, these going concern risks are not discussed in this dissertation. However, a very prevalent going concern risk for South African long-term insurers is the impact of HIV/AIDS, which is discussed in the next section.

2.3.7 *Impact of HIV/AIDS*

The impact of HIV/AIDS on the South African long-term insurance industry has been the topic of many articles in the popular financial media over the past number of years (refer to, *inter alia*, Sanlam, 2004; Laschinger, 2003; Wood, 2002; Bisseker, 2001; Dyson, 2001 and Financial Mail, 1996).

This impact on the South African industry to date has resulted in the following notable developments:

- Attempts to adapt existing insurance products to exclude cover for carriers of the HIV virus (largely by means of the introduction and enforcement of exclusion clauses and mandatory HIV testing as part of the underwriting process) (Dyson,

2001:26). However, as a result of outcries regarding the discriminatory nature of such exclusions the Life Offices Association recently announced that the industry has agreed to cease the inclusion of HIV/AIDS exclusion clauses for all new policies issued with effect from 1 January 2005 (FSB, 2004b:18).

- The development of new individual life (Financial Mail, 1996) and employee benefits (Bisseker, 2001:26) products to provide insurance cover for carriers of the HIV virus. However, the high mortality risk involved in these cases resulted in these products being prohibitively expensive (Dyson, 2001:26).

In addition to the high prevalence of HIV/AIDS in South Africa compared to most of the developed world, South African insurers are more at risk than those in areas such as Thailand, Central and Eastern Europe, which also have a high prevalence of the disease, but lesser-developed insurance markets. Erlandsen (as cited by Dyson) states that the South African long-term insurance industry is probably the one in the world with the most major concerns (Dyson, 2001:26).

The epidemic is affecting the very basis of the risk underwriting process employed by insurers by changing the life expectancy of populations insured by the insurer. It also complicates the setting of actuarial assumptions regarding such life expectancies. The stigma attached to AIDS-related deaths still often results in death certificates not reflecting AIDS as the cause of death, leading to incorrect historical data relating to the number of deaths in a particular population from AIDS-related causes.

The impact of the epidemic on the risk underwriting process as discussed above has a direct impact on the risk of material misstatement of policy liabilities as a result of incorrect actuarial assumptions regarding life expectancies. It also introduces a new element of uncertainty and consequently subjectivity into the actuarial assumption-setting process, with a concomitant increase in the complexity of audit procedures involving these assumptions.

Without significant innovations in underwriting, the scrapping of HIV/AIDS exclusion clauses from new insurance policies will most likely result in prohibitively high premiums on these policies. This may result in some South African insurers discontinuing certain product ranges and can result in an increase in going concern

risk, which is also an important consideration for the auditor (refer to Section 2.3.6: *Going concern risk*). Going concern risk is also potentially increased by the fact that the scrapping of these clauses could conceivably result in increases in the lapse and surrender rates of existing policies as a result of existing HIV-negative policyholders not being willing to “subsidise” the insurance risk of new HIV-positive policyholders. This issue is potentially exacerbated by the “politicisation” of the use of anti-retroviral drugs in South Africa, which is not discussed in this dissertation.

3. OVERVIEW OF THE REMAINDER OF THE DISSERTATION

The dissertation is structured in such a manner that this chapter contains background information regarding various issues relevant to the South African long-term insurance industry and the related audit issues. In order to provide an overview of the structure of the research, Chapter 2 contains, *inter alia*, an overall discussion of the research method employed in the research project as a whole. Various chapters following Chapter 2 then contain more detailed descriptions of the research methods employed in the respective parts of the research project, together with the findings and conclusions from the respective parts of the research.

Against the background presented in the previous sections of this chapter, the remainder of the dissertation comprises the chapters briefly summarised below.

Chapter 2: Research objective, design, method and scope

This chapter includes a discussion of the objective of the research and its value. It also explains the research design and method followed and defines the scope of the research.

Chapter 3: High inherent risk industry-specific elements in financial statements of listed South African long-term insurers

The concept of inherent risk is discussed on the basis of a literature study to act as foundation for the identification of characteristics of accounts balances and classes of transactions indicative of potential exposure to inherent risk.

The responses to a questionnaire relating to industry-specific elements of the financial statements of listed South African long-term insurers exposed to a high level of inherent risk are analysed and discussed, supporting the hypotheses that (1) policy liabilities arising under insurance contracts and (2) earnings from long-term insurance activities are those industry-specific elements potentially exposed to the highest level of inherent risk.

Chapter 4: Selected processes affecting policy liabilities and the related earnings

A further questionnaire completed by auditors of listed South African long-term insurers comprised two different parts applicable to business and accounting processes and overall audit strategies respectively.

In this chapter, responses to the first part of the questionnaire are analysed to identify the primary business and accounting processes affecting policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities of listed South African long-term insurers. The internal controls included in these processes, which differ among insurers, are those of potential importance to the auditor in the assessment of control risk.

It should be noted that the inclusion of business and accounting processes in the research is incidental to the main objective of the research as set out in Chapter 2. It is included mainly to allow the research findings to be presented in a comprehensive format.

Chapter 5: Analysis and interpretation of responses to questionnaire relating to overall audit strategies

In this chapter, the responses received to the second part of the questionnaire mentioned in the summary of Chapter 4 above are analysed, interpreted and discussed. The overall structure of this chapter, read with Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*, and the discussion of the research findings within the overall structure of these chapters effectively form a best practice framework for the formulation of overall audit strategies for insurance contracts and the related earnings of listed South African long-term insurers.

As such, this chapter, read with Chapter 6, therefore contains the research findings that achieve the main objective of the research.

Chapter 6: The incorporation of actuarial expertise into the overall audit strategy

The statutory actuary of a long-term insurer is ultimately responsible for calculating and disclosing policy liabilities and movements therein. As a result, the relationship between the auditor and the statutory actuary as a specialist requires specific attention as an element of the overall audit strategy.

This chapter includes a discussion of the relationship between the auditor and the statutory actuary in the audit of a listed South African long-term insurer. This is followed by a discussion of various alternatives for overall audit strategies for this area, based on, *inter alia*, international and local literature reviewed and responses to questions contained in the questionnaire mentioned in the summaries of Chapters 4 and 5 above. The chapter concludes with an exploration of pitfalls and problems in this relationship, as well as suggestions to address these.

Chapter 7: Summary and conclusion

This chapter contains a summary of the research results and a final conclusion, as well as potential areas for future research.

4. CONCLUSION

Chapter 1 explored issues relating to financial reporting and auditing in the context of the audit of the financial statements of listed South African long-term insurers with a view to providing a preliminary identification of the industry-specific areas of these financial statements that are potentially exposed to the highest risk of material misstatement and the related audit issues. The following areas were identified as being potential high-risk areas and, as a result, form the subject matter for this research:

- policy liabilities arising under insurance contracts; and
- earnings from long-term insurance activities.

Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers* explores the exposure of these areas to inherent risk in depth.

To properly comply with the prevailing South African auditing pronouncements in the audit of a listed South African long-term insurer, the auditor should devote the appropriate proportion of time and resources, as well as level of knowledge, experience and expertise, to the performance of audit procedures relating to the abovementioned areas. These areas should be addressed in the overall audit strategy of the auditor.

The ultimate objective of this research is to develop a best practice framework for the formulation of overall audit strategies for the high-risk areas identified above. In the next chapter, the research objective and its value are discussed in more detail, together with the research design and method followed and the scope of the research.

CHAPTER 2
RESEARCH OBJECTIVE, DESIGN, METHOD AND SCOPE

	Page
1. INTRODUCTION	44
2. RESEARCH OBJECTIVE AND VALUE	44
3. OVERALL RESEARCH DESIGN AND METHOD	47
4. DESIGN AND METHOD FOR RESEARCH ON OVERALL AUDIT STRATEGIES	50
4.1 Steps followed in the research process	51
4.2 Research design	51
4.2.1 <i>Qualitative vs. quantitative research designs</i>	51
4.2.2 <i>Mouton's typology</i>	55
4.2.2.1 <i>Empirical vs. non-empirical</i>	55
4.2.2.2 <i>Primary vs. existing (secondary) data</i>	55
4.2.2.3 <i>Degree of control over data</i>	56
4.2.3 <i>Further classification of the research design</i>	56
4.2.3.1 <i>Exploratory vs. validation research</i>	56
4.2.3.2 <i>Descriptive vs. explanatory studies</i>	57
4.2.3.3 <i>Case study research</i>	58
4.2.4 <i>Conclusion</i>	59
4.3 Data collection	60
4.4 Data analysis	66
5. RESEARCH SCOPE	67
5.1 The overall audit strategy	67
5.2 Insurance contracts	68
5.3 Literature review	70
5.4 Questionnaire to identify elements of financial statements potentially exposed to a high level of inherent risk	72
5.5 Questionnaire to identify processes and obtain information regarding overall audit strategies	72

5.6	Other	75
5.6.1	<i>Audit opinions on regulatory returns</i>	75
5.6.2	<i>Audit opinions on interim financial reports</i>	76
6.	CONCLUSION	76

LIST OF TABLES

	Page
Table 2-1: Steps in this research and corresponding location	51
Table 2-2: Summary of relevant auditing guidance issued in Australia, Canada, New Zealand, SA, the UK and the USA as at 28 February 2005	71
Table 2-3: Listed South African long-term insurers and their auditors as at 29 October 2003	73

1. INTRODUCTION

Chapter 1: *Introduction and background* includes an overview of financial reporting and audit-related issues relevant to South African long-term insurers and their auditors and serves as important background to the development of the research objective.

Whereas Chapter 1: *Introduction and background* creates an overall context for the research, Chapter 2 describes in more detail the objective of the research and its value. The design of the research and the method employed in the research, including data analysis and collection, are described. A discussion of the scope of the research concludes the chapter.

2. RESEARCH OBJECTIVE AND VALUE

The objective of this research is to develop a best practice framework for the formulation of effective and efficient overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers on the basis of properly conducted academic research.

The term “overall audit strategy” is discussed in Section 5.1: *The overall audit strategy*. The combination of the tests of controls and substantive tests to be included in the overall audit strategy for policy liabilities and the related earnings depends on various factors, including the risk of material misstatement related to relevant assertions, the existence and quality of relevant internal controls, the audit methodology of the particular auditing firm and the cost-efficiency of the combination of tests of controls and substantive tests. This combination would consequently differ among the audits of different listed South African long-term insurers. As a result, it is not the objective of this research to attempt to formulate a uniform best practice overall audit strategy to be employed in the audits of all listed South African long-term insurers. Instead, this research strives to formulate a best practice **framework** within which auditors should formulate such overall audit strategies. Consequently, the objective of this research is the development of such framework.

In achieving this objective, the research resulted in the development of significant new knowledge. The knowledge will be practically applied in the near future by utilising it as the basis for an extensive revision of the extant SAICA *Audit Guide on Long-Term Insurance* (SAICA, 1998a) and the guide entitled *The Auditor's Relationship with the Statutory Actuary in the Long-Term Insurance Industry* (SAICA, 1998b). The SAICA Long-Term Insurance Interest Group has already approved such project (refer to Appendix B).

The abovementioned guides were issued by SAICA as part of its *Accounting and Auditing Series* in December 1998. While the author does not disagree with the content of the guides, he believes that it is essential to revisit, refine and update the guides because of factors such as the following, discussed in Chapter 1: *Introduction and background*:

- Rapid and significant changes and expected proposed changes to financial reporting by listed South African long-term insurers.
- Increased demands for financial information resulting from, *inter alia*, the demutualisation of Sanlam Ltd and Old Mutual Plc.
- Regulatory scrutiny of the industry.

The SAICA guides provide very little detailed guidance on the process to be followed to formulate an adequate, appropriate and efficient overall audit strategy to be followed in respect of policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities.

This research provides valuable, well-substantiated, practically based, well-documented and useful information for the improvement and refinement of the existing guidance. P.J. Strachan, Chairperson of the Long-Term Insurance Interest Group of SAICA, indicated that he “certainly would be a supporter of the process and believe[s] that the whole issue would add value not only to [SAICA] but to the industry as well” (Strachan, 2003). This committee subsequently also verbally communicated its support for the research to the author and has been providing such support.

The valuable contribution of this research to existing knowledge is also evident from the fact that Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers* of this dissertation has been published as a research paper in the accredited journal *Meditari Accountancy Research* in a condensed form. This article is included in this dissertation as Appendix A, as it provides the basis for Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers*.

The salient findings of the research in respect of the incorporation of actuarial expertise into the audit process (refer to Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*) have also been presented as a refereed paper at a mini-conference of the Southern African Accounting Association in June 2005 (SAAA, 2005). Furthermore, an article summarising the issues encountered by the auditors of South African long-term insurers, as discussed in Chapter 1, Section 2.3: *Audit issues*, has been accepted for publication in the August 2005 issue of the popular professional accountancy journal *Accountancy SA*.

In addition, the research is also of value to:

- the auditors of South African long-term insurers, presenting them with a best practice against which to compare their current overall audit strategies for policy liabilities arising under insurance contracts and related earnings from long-term insurance activities;
- the auditors of long-term insurers in neighbouring countries (e.g. Namibia) that have adopted South African guidance for auditors;
- investment analysts performing research on listed South African long-term insurers, by assisting them to ask probing questions relating to the high-risk areas identified in this research;
- accountants and actuaries employed by long-term insurers, in enabling communication between these two professions within the organisation by promoting a better understanding of the complex issues involved in these areas in both professions;

- the international providers of auditing guidance for long-term insurers, by providing input to the drafting of such guidance and contributing to international harmonisation of such guidance; and
- academics conducting research on the audit process, audit risk, overall audit strategies, long-term insurance and related fields.

3. OVERALL RESEARCH DESIGN AND METHOD

The overall design of and method employed in this research are summarised as follows:

1. Existing literature in the following areas was reviewed:
 - 1.1 Local and international guidance for auditors on the audit of long-term insurers and, in particular, the audit of policy liabilities and earnings from long-term insurance activities (documented in Chapters 1, 3, 5 and 6). This literature includes pronouncements by local and international professional bodies, legislation, papers published in accredited research journals, articles in popular publications, authoritative textbooks on auditing and long-term insurance and relevant local and international master's and doctoral theses and dissertations.
 - 1.2 The concept of inherent risk and, in particular, how it relates to the audit of long-term insurers (documented in Chapter 3).
 - 1.3 The use of research based on questionnaires as a research design (documented in Section 4: *Design and method for research on overall audit strategies* of this chapter).
 - 1.4 The auditor's relationship with the statutory actuary of the long-term insurer in the conduct of the audit (documented mainly in Chapter 6).
2. The assessment of inherent risk by the auditors of listed South African long-term insurers was analysed. These assessments were analysed per assertion related to account balances and classes of transactions specific to the

financial statements of these insurers (“industry-specific” elements of the financial statements).

A questionnaire was developed and sent to the auditors of all South African long-term insurers listed on the JSE Securities Exchange South Africa as at 29 October 2003 for completion. Responses were processed to calculate a “Relative Inherent Risk Index” to rank industry-specific account balances and classes of transactions relative to each other on the basis of their level of exposure to inherent risk.

This process was followed to prove that (1) policy liabilities and (2) earnings from long-term insurance activities are the industry-specific items in the financial statements potentially exposed to the highest level of relative inherent risk, as provisionally hypothesised in Chapter 1, Section 4: *Conclusion*.

The research design and method for this part of the research are described more comprehensively in Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers*. The research yielded significant support for the abovementioned hypotheses.

The results of this part of the research justify the focus and scope of the remainder of the research.

3. The primary business and accounting processes that affect policy liabilities and earnings from long-term insurance activities were identified as part of the questionnaire referred to in point 4 below. The internal controls within these business and accounting processes (which differ amongst insurers, depending on, *inter alia*, size, types of products sold and internal control structure) are implemented by management to address the inherent risks to which these financial statement components are exposed. They are therefore of importance to the auditor in the assessment of the control risk relating to the different assertions applicable to these financial statement components.

Although this step is intended to be incidental to the research, its results are included as Chapter 4: *Selected processes affecting policy liabilities and the related earnings* to allow the research findings to be presented in a comprehensive format.

4. On the basis of the information gathered during the literature review, a standardised questionnaire was designed and distributed to obtain detailed information regarding experienced auditors' views on various elements of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings. These views are based on their experiences with audit strategies currently being applied by them in practice. A more detailed discussion of this crucial part of the research design and method follows in Section 4: *Design and method for research on overall audit strategies*.
5. The responses to the questionnaire in point 4 above were analysed and interpreted, taking into account the results of the literature review (refer to point 1 above) to develop a best practice framework for the formulation of effective and efficient overall audit strategies for policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities of listed South African long-term insurers. The findings of this research are documented in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

Consideration was also afforded to customising the abovementioned framework for the audit of smaller, non-listed South African long-term insurers. However, in response to a specific question in the abovementioned questionnaire requesting the views of respondents on the respects in which the overall audit strategy for such companies should differ from that for a large, listed insurer (Question 224), no respondents indicated that any significant differences should exist (also refer to Chapter 5, Section 9.3: *Audit of smaller, non-listed South African long-term insurers*). This finding supports the *a priori* expectation of the researcher, which was based on the fact that the

vast majority of South African long-term insurers, whether listed or not, are relatively large companies that operate in a highly regulated and publicly visible industry, necessitating rigorous audit practices and reliable audit opinions.

On the basis of this finding, it was decided that an attempt to customise the framework developed in this research for smaller, non-listed South African long-term insurers would not be sensible.

The next section contains a detailed discussion and description of the research design and method employed in the research on overall audit strategies for insurance contracts and the related earnings, as summarised in points 4 and 5 above.

4. DESIGN AND METHOD FOR RESEARCH ON OVERALL AUDIT STRATEGIES

A review of existing literature regarding research designs, methods and methodologies presents a myriad of alternatives to the researcher. The purpose of this section is to describe and substantiate the selection of the primary design of and to describe the research process followed in the part of the research focused on overall audit strategies as summarised in points 4 and 5 in the previous section. It should be noted that the contents of this section do not extend to the research design and process followed in respect of research on inherent risk related aspects. The latter is summarised in point 2 in the previous section and discussed in detail in Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers*.

The section commences with a summary of the steps followed in the research, followed by a discussion of relevant literature reviewed and the classification of the research according to various typologies of research design identified in the literature review. A detailed description of the data collection and analysis methods concludes the section.

4.1 Steps followed in the research process

This research can be categorised as case study research. The reasons for such classification are discussed in Section 4.2.3.3: *Case study research*.

Ryan, Scapens & Theobald (2002:153) describe case study research as “a complex interactive process that cannot be characterized by a simple linear model”. Although case study research consists of a number of discernible steps, the researcher iterates through these steps as many times as is required to obtain the desired level of understanding of the data. Table 2-1 briefly describes each step with an indication of where the results of the particular step are located in the dissertation.

Table 2-1: Steps in this research and corresponding location

	STEP	LOCATION
1	Clear specification of the research question(s)	Chapter 2, Section 2
2	Selection of the appropriate research method	Chapter 2, Sections 3 and 4
3	Review of the relevant literature to identify the types of data to be obtained from each case (unit of analysis)	Chapter 2, Section 4; Chapters 4, 5 and 6
4	Clear statements of any existing theory to assist in analysing and “reconstructing” research findings	Chapters 4, 5 and 6
5	Collection and recording of data using the appropriate means, including questionnaires	Chapter 2, Section 4
6	Assessing data collected for, <i>inter alia</i> , procedural and contextual reliability	Chapters 5 and 6
7	Identifying and, if appropriate, explaining patterns in the data	Chapters 5 and 6

The research design and method employed in this research are discussed in the next sections.

4.2 Research design

4.2.1 *Qualitative vs. quantitative research designs*

The first step in the selection of a research design was a decision as to whether a quantitative or a qualitative research design, or a combination thereof, should be employed. Researchers on the usefulness of qualitative research in accounting and related sciences have been debating this issue over a long period of time.

In the 1960s and 1970s, the majority of academic research in accounting and related fields was:

- in the earlier years, of a descriptive nature, where phenomena already existing in the world of the practicing accountant were merely recorded; and
- in later years, in an attempt to add more “scientific” credibility thereto, almost exclusively quantitative and statistical in nature (Tomkins & Groves, 1983a:362).

Tomkins and Groves (1983a:364) propose that this was the result of most academics not using their practical experience in deciding on research topics. This caused a decline in the usefulness of academic research for practitioners.

During the late 1970s and early 1980s, advocates of more naturalistic (often qualitative) investigation styles increasingly started to challenge the almost exclusive use of quantitative research in the social sciences in favour of the use of qualitative research designs (Tomkins & Groves, 1983a:362). Blumer (as cited in Tomkins & Groves, 1983a:363), a supporter of naturalistic research, warns that in quantitative statistical research, the **research model** is at risk of becoming the focus of the research, instead of a thorough **knowledge of the field being studied**. He argues that if the researcher adopts a more naturalistic, exploratory and qualitative style of research, closer contact with and consequently better knowledge of the field being studied are achieved.

In 1983, against this background, Tomkins and Groves published a controversial article entitled *The Everyday Accountant and Researching His Reality* (Tomkins & Groves, 1983a) on the basis of their research. They recommended that, for academic research in accounting and related fields to become more useful in practical settings, the research should focus on “studying how *practitioners* perceive their worlds ... and how they perceive them[selves] affecting accounting practices...” (1983a:364), indicating a preference for a naturalistic research style. They quote as an example research attempting to understand specific actions “through the eyes” of practitioners involved in those actions (Tomkins & Groves, 1983a:370).

Morgan (1983) strongly agrees with the arguments of Tomkins and Groves in support of the practical usefulness of naturalistic research in accounting and related fields.

He believes that this usefulness is the result of “practice developed from the point of view of those involved in practice, rather than from that of the detached researcher-observer” (Morgan, 1983:387). His view is supported by Rubin and Rubin (1995:56).

Although Abdel-Khalik and Ajinkya (1983) criticised certain aspects of the abovementioned article by Tomkins and Groves, they agreed that naturalistic research is a necessity if the phenomenon being researched cannot be simulated in a laboratory environment (Abdel-Khalik & Ajinkya, 1983:377 and 380). They believe that, for example, interviews (and, in the view of the author, questionnaires), which are not disruptive to a natural setting, can result in discoveries that more closely mirror reality.

In another article by Tomkins and Groves (1983b), written largely as a rebuttal to Abdel-Khalik and Ajinkya (1983), they agree with aspects of this suggestion, although they feel that “scientific” (often quantitative and statistical) research should not be the default research type. Willmott (1983:391) interprets the argument of Tomkins and Groves as stating that the naturalistic (often qualitative) style of research has sufficient “intellectual integrity” to be recognised. Welman and Kruger (2001:8) state clearly that the use of qualitative styles of research should not be seen as easier than quantitative approaches.

Tomkins and Groves therefore believe that the researcher should make an informed decision between using “scientific” and naturalistic research, or a combination thereof (1983b:409). They conclude that “scientific” research and naturalistic research can co-exist and that each has its purpose, depending on the research problem and phenomena being researched (Tomkins & Groves, 1983b:414). This view is supported by Willmott (1983:391) and Yow (1994:7). Neuman and Kreuger (2003:134-135) maintain that quantitative and qualitative research complement each other in a number of ways, including:

- Quantitative research requires existing hypotheses at the commencement of the research, whereas qualitative research allows the development of hypotheses once the researcher has gained a deeper understanding of the data.

- Measures pre-exist at the commencement of quantitative research, whereas measures specific and appropriate to the research setting or researcher are often created during qualitative research.
- In quantitative research, data has to be precisely measurable, whereas qualitative research accommodates data in the form of words and images that are not quantitatively measurable, but nevertheless meaningful.
- Quantitative research findings are presented in quantitative and statistical formats showing how hypotheses are supported, whereas qualitative research data allows extraction of common themes and generalisations from the data and presentation of research findings in a coherent and logical manner.

The objective of this research is clearly set out in Section 2: *Research objective and value*. It involves, *inter alia*, an investigation of practitioners' views that are based on their experiences with overall audit strategies currently being applied in practice, with a view to using this information to develop a best practice framework for the formulation of overall audit strategies for insurance contracts and the related earnings. It therefore aims to **understand** practitioners' views and, where possible, to **generalise** these views for the audits of all listed South African long-term insurers. According to Tomkins and Groves (1983a:370), these elements are indicative of a "naturalistic" research style as described above. It is a typical example of an attempt to understand reality through the eyes of a practitioner in order to utilise this understanding in developing a "theory" in the form of a framework for the formulation of overall audit strategies.

Yow (1994:5) and Neuman and Kreuger (2003:135) contend that, whereas quantitative research often involves the manipulation of a limited number of variables, qualitative research is inductive in nature (i.e. the researcher "learns from" interaction with the variables) and involves consideration of the interrelationships between a large number of interrelated variables. The research design employed in this research exhibits these typical characteristics of qualitative research, particularly as the researcher's intention is to "learn from" the experiences of practitioners in order to use this knowledge to develop, by means of induction, a best practice framework for the formulation of overall audit strategies.

4.2.2 Mouton's typology

The research design employed in this research can be classified by making use of a typology of research design types developed by Mouton (2001:57). The model classifies research firstly as being either **empirical** or **non-empirical**. Empirical research is further classified as being based on either **primary data** (including surveys and questionnaires) or **existing (secondary) data** (including statistical modelling and secondary data analysis). In another dimension, the model also classifies research according to the degree of control over the data.

Sections 4.2.2.1 to 4.2.2.3 contain a discussion of the rationale for classifying the design of the research according to Mouton's model.

4.2.2.1 *Empirical vs. non-empirical*

Ryan, *et al.* (2002:13) conclude that research is of an empirical nature if it exhibits both the following characteristics:

1. it is based on experiential grounds (i.e. actual experiences in the "real world"); and
2. it cannot be justified by the use of reason only (i.e. it has to be capable of being justified in terms of the actual objects being studied).

Using the abovementioned classification suggested by Mouton, this research can be classified mainly as an **empirical** study, as

1. it is largely based on experiential grounds (the experience of experienced auditors with the application of actual overall audit strategies in practice); and
2. its results are capable of being derived from the units of analysis (experiences of experienced auditors with overall audit strategies) studied in the research.

4.2.2.2 *Primary vs. existing (secondary) data*

The "unit of analysis" of research is described by Mouton (2001:51) as the object of the research, i.e. what the researcher is interested in investigating. Applying the description to this research, it is clear that the units of analysis are the experiences of

experienced auditors with overall audit strategies for policy liabilities and the related earnings of listed South African long-term insurers.

Neither the literature review conducted as part of this research nor enquiries from experienced auditors and SAICA indicated that data of this nature had previously been collected in the South African context. Consequently, it appears as though no research of this nature has previously been undertaken.

In accordance with the classification suggested by Mouton, this research is therefore classified as using **primary data** obtained by means of questionnaires completed by experienced auditors.

4.2.2.3 Degree of control over data

The data used in this research was collected in the form of questionnaires completed by experienced auditors and is largely of a descriptive (non-numerical) nature. The data exists and was collected in natural field settings (the environment in which the audit practitioner operates), as opposed to a simulated or laboratory environment, which resulted in the researcher having a relatively low degree of control over the data. Given the structured nature of the questionnaire (refer to Appendix G) and the limited number of respondents (refer to Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*), however, the researcher maintained a high degree of control over the **collection** and **analysis** of the data.

4.2.3 Further classification of the research design

4.2.3.1 Exploratory vs. validation research

On the basis of the state of existing knowledge of a particular field, Mouton (1996:102) distinguishes between research:

- to test the validity of existing theories and explanations in previously well-researched areas (“validation” or “confirmatory” studies); and
- to collect new data in areas where little previous research exists, in order to develop new hypotheses or theories to explain the data (“exploratory” studies).

As was mentioned in Section 4.2.2.2: *Primary vs. existing (secondary) data*, it appears as though no research of this nature has previously been undertaken. On this basis, this research is classified as being an **exploratory** study to develop a best practice framework for the formulation of overall audit strategies for insurance contracts and the related earnings.

In this research, statistical hypotheses are not tested, as the nature of the research is exploratory (Ryan, *et al.*, 2002:143-144). The absence of hypothesis testing does not contradict the classification of the research as empirical in Section 4.2.2.1: *Empirical vs. non-empirical*, as Ryan, *et al.* (2002:117) state that, whereas empirical research in accounting and related fields often involves the testing of statistical hypotheses, it is not necessarily the case in all empirical research in these fields.

This classification is supported by the fact that this research was classified in Section 4.2.1: *Qualitative vs. quantitative research designs* as being of a qualitative nature. Mouton (1996:103) specifically describes exploratory studies as comprising, *inter alia*, qualitative research.

4.2.3.2 Descriptive vs. explanatory studies

Mouton (1996:102) also classifies research based on the nature of existing knowledge, as:

- “descriptive” studies, providing descriptions of existing conditions in the world; and
- “explanatory” studies, suggesting reasons or explanations (including theories and models) for events in the world.

The objective of this research is to develop a best practice framework for the formulation of overall audit strategies. The author does not primarily attempt to understand practitioners’ reasons for employing a particular overall audit strategy on their selected audit clients. The data used in developing the framework as obtained by means of the questionnaire is primarily of a descriptive nature: it describes the

views of practitioners that are based on their experiences of strategies employed on actual audits. On these grounds, this research is classified as a **descriptive study**.

4.2.3.3 Case study research

Ryan, *et al.* (2002:143) describes case study research in accountancy as a study of accounting and related fields (including auditing) in their practical settings. As research design it therefore offers the possibility of understanding the nature and application of overall audit strategies in practice. A distinguishing characteristic of case study research is the inclusion of a limited number of units of analysis or cases (Welman & Kruger, 2001:182). So-called “descriptive case studies” (Ryan, *et al.*, 2002:143) are often supported by professional bodies as they offer an opportunity to determine best practice. The descriptive objective of this research, the limitation of the number of units of analysis to five cases (refer to Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*) and the support of this research by SAICA as they believe that it will contribute to the revision of best practice guidance for the auditors of long-term insurers as described earlier in this chapter, clearly classify the design of this research as descriptive case studies.

Against this background, it is important to properly define a “case” being studied in the research. The research draws upon the views and opinions of experienced auditors involved in the audit of five listed South African long-term insurers, as expressed in the questionnaire. These views and opinions have largely been formed on the basis of experience with the audit of the specific long-term insurers selected for this research. A “case” is therefore defined as the experienced auditor(s) who completed each of the five questionnaires.

According to Mouton (2001:150), the strengths of case study research include the depth of insights gained and the establishment of rapport with research subjects. The questionnaire used in this research (refer to Appendix G) was lengthy (224 questions) and required a high level of expertise to complete. As a result, the establishment of rapport with the experienced auditors involved prior to distributing the questionnaire was a critical success factor for this research. The success of this

process, adding to the quality and validity of the research, is evident from the quality of the data in the completed questionnaires returned to the author.

Mouton (2001:150) and Ryan, *et al.* (2002:148) mention the potential lack of generalisability of the research results as a limitation of case study research. Taking into account the objective of this research, namely to develop a best practice framework for the formulation of overall audit strategies for an area where no previous research has been done, the author does not believe this limitation to be significant in this research. In the opinion of the author, the inclusion in the research of five long-term insurers comprising a very significant portion of the South African long-term insurance industry, coupled with the inclusion of all auditing firms responsible for the audits of listed South African long-term insurers as research subjects, as described in Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*, adequately addresses the risk of the results of the research not being applicable to audits of all listed South African long-term insurers.

Other potential weaknesses of case study research identified by Mouton (2001:150) and Ryan, *et al.* (2002:159) include difficulties in defining the subject matter of the research, researcher bias and issues relating to the confidentiality of information. As the specific nature, objectives and context of this research do not render the former two areas as significant weaknesses in this research, no further elaboration on these was considered necessary.

With regard to confidentiality of information, one respondent omitted answers to an insignificant number of questions in the questionnaire (Appendix G) for client confidentiality and/or auditing firm risk management reasons. However, the nature of the omissions was such that they did not significantly impair the data provided by this respondent in the context of the main objective of the research.

4.2.4 Conclusion

The primary research design employed in this research can be described and classified using a number of different, co-existing and overlapping typologies

described in existing literature on research designs, methods and methodologies. Each of the previous sections contains a summary of the literature reviewed, a description of a typology and a discussion of the classification of this research according to the particular typology. The results of this process can be summarised by describing the primary design of the research, the main data collection method of which is a questionnaire completed by experienced auditors, as follows:

Qualitative (Section 4.2.1), empirical (Section 4.2.2.1), exploratory (Section 4.2.3.1), primarily descriptive (Section 4.2.3.2) case study research (Section 4.2.3.3) on the basis of primary data (Section 4.2.2.2), maintaining a low degree of control over the data, but a high degree of control over data collection and analysis (Section 4.2.2.3) using a naturalistic research style (Section 4.2.1).

The method followed for data collection is discussed in the next section.

4.3 Data collection

Section 3: *Overall research design and method* and Section 4: *Design and method for research on overall audit strategies* contain references to the questionnaire developed to collect the data required for the research and the scope of the research undertaken in the process of developing the questionnaire. The questionnaire appears in Appendix G. The process followed in the development of the questionnaire is explained below.

The review of available local and international guidance on the audit of long-term insurers in general, and policy liabilities and the related earnings in particular, resulted in the identification of a number of significant areas and elements to be addressed in the questionnaire. The researcher's previous practical experience in and knowledge of the field were combined with the results of the literature review to conceptualise and operationalise the areas and elements identified as questions to be answered by experienced auditors of listed South African long-term insurers. This starting point is consistent with the belief of De Vaus (1996:81) that a questionnaire

should reflect a combination of “theoretical thinking and an understanding of data analysis”.

To avoid common errors in the formulation of questions and the construction of the questionnaire, authoritative literature on research methodology was reviewed. Where practicable and relevant, the suggestions for avoiding common errors contained in the literature were implemented in drafting the questionnaire. Specific attention was afforded to issues such as:

- providing definitions of concepts where ambiguity might exist (De Vaus, 1996:49);
- using a combination of open and closed-ended questions (Converse & Presser, 1986:33-35; De Vaus, 1996:86-87; Neuman & Kreuger, 2003:273; Sudman & Bradburn, 1982:148);
- using a combination of free-form and forced-choice questions (De Vaus, 1996:88-89);
- avoiding ambiguity and vagueness (Converse & Presser, 1986:13; De Vaus, 1996:83; Mouton, 2001:10; Neuman & Kreuger, 2003:264);
- avoiding double-barrelled questions (De Vaus, 1996:82; Mouton, 2001:103; Neuman & Kreuger, 2003:264);
- proper layout of the questionnaire and ordering of questions (Babbie, 1990:135-143; De Vaus, 1996:92-95; Mouton, 2001:104; Neuman & Kreuger, 2003:276-283; Sudman & Bradburn, 1982:207-208 and 230-231); and
- where practicable, asking the respondent what audit strategy (s)he believes to be appropriate in the audit of a long-term insurer based on his/her actual experience, instead of asking what audit strategy is currently being applied on his/her client, in order to avoid psychological negativity or threat and non-response (Bradburn & Sudman, 1979:15; De Vaus, 1996:101).

Where relevant, the question was linked to a reference to the source from which the question was conceptualised and operationalised (refer to the column entitled “Source(s)” in Appendix G and explained in the key to this column included in the appendix). These references did not form part of the formal questionnaire, but were solely for use by the researcher in analysing and interpreting responses.

Once the majority of questions had been formulated, the manner in which the data would be recorded and analysed was conceptualised. No example of a framework for the development of an overall audit strategy for the audit of policy liabilities arising under insurance contracts and the related earnings of a listed South African long-term insurer existed prior to this research (neither locally nor internationally). The development of such a basic framework was therefore necessary to provide structure to the research questionnaire. This framework was developed as part of the research and, as such, makes a significant contribution to existing knowledge. The existence of this basic framework can be seen in the structure of the questionnaire (i.e. different parts and subsections) and the categorisation and ordering of questions in the questionnaire in Appendix G as described in the next paragraph.

As the overall audit strategy is largely a product of the audit planning process (refer to Section 5.1: *The overall audit strategy*), it was decided to structure the questionnaire as far as practicable according to the typical steps in the audit planning process as set out in SAAS 300: *Planning* (PAAB, 1996a:para. .09) and also in a less structured format in ISA 300 (Revised): *Planning an audit of financial statements* (IAASB, 2005h). To achieve this structure, the following process was followed:

- The list of questions existing at that stage was separated into individual questions.
- A heading indicative of each typical step in the audit planning process was placed on a blank wall. These headings can be seen as section headings in the questionnaire in Appendix G.
- Each individual question was considered in turn and categorised under the most appropriate heading.
- On completion of this process, the questions in each category (i.e. under each heading) were ordered in the most logical fashion by reordering them on the wall under the particular heading.
- An electronic version of the list of questions was then converted into the same order and format as the structure of questions on the wall, resulting in a first draft of the questionnaire.

The questionnaire was reviewed by the promoter and co-promoter of the study for, *inter alia*, technical correctness and practicability and changes were made to incorporate their suggestions.

It should be noted at this point that, due to the lengthy nature of the questionnaire, the researcher originally intended to conduct structured interviews with respondents on the basis of the questions in the questionnaire, instead of sending the questionnaire to respondents for completion. Respondents were therefore contacted at this point in the following manner in order to secure their participation in the research and to arrange suitable times for the interviews:

- The Chairman of the SAICA Long-Term Insurance Interest Group sent an e-mail to respondents informing them of the support of SAICA for the research project. A copy of the e-mail is contained in Appendix B.
- The abovementioned e-mail was followed by an introductory e-mail from the researcher to respondents to introduce the research project in more detail. It included a summarised *curriculum vitae* of the researcher, a description of the research, an explanation of the importance of participation in the research and a commitment to maintain the anonymity and confidentiality of individual responses, and obtained information required to arrange meeting times for the interviews. Copies of this e-mail and its attachments are contained in Appendices C, D and E.

As recommended by, *inter alia*, Babbie (1990:220-235), Converse and Presser (1986:59-68), De Vaus (1996:99-104), Mouton (2001:103), Neuman and Kreuger (2003:262) and Sudman and Bradburn (1982:282-285), the draft questionnaire was thereafter pilot tested with the assistance of one of the five selected respondents (refer to Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*). The draft questionnaire was sent to the respondent for review and completion in advance of a contact session in the format of a workshop and structured interview to discuss aspects such as the nature, applicability and number of questions. The workshop and structured interview, which lasted approximately six hours, was recorded on tape to allow the researcher to refer back to the proceedings at a later stage. Specific attention was given to aspects

identified by Converse and Presser (1986:54-59) and De Vaus (1996:100-101), including:

- expected variations among responses;
- clarity of questions;
- redundancy of questions;
- non-responses to certain questions;
- acquiescent responses to “agree/disagree”-type questions (also refer to Converse and Presser, 1986:38);
- difficulty of tasks required of the respondent; and
- maintaining the interest and attention of the respondent.

The pilot test resulted in changes to certain aspects of the questionnaire, after which the questionnaire was finalised. It also led the researcher to decide to send the final questionnaire to all respondents by e-mail for completion, rather than conducting structured interviews as originally intended. This decision was the result of evidence arising from the pilot test suggesting that the structure and content of the questionnaire and the clarity of the questions were such that individual completion by respondents, followed by short meetings to clarify any uncertainties arising from responses, would be more efficient and effective than interviews.

The pilot test also provided an indication of the time commitment required from respondents to complete the questionnaire, which was communicated to them.

The final questionnaire as it appears in Appendix G was e-mailed to all five selected respondents (refer to Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*) for completion within three weeks under a covering e-mail (Appendix F). Respondents were also contacted telephonically to confirm receipt of the questionnaire. For quality assurance purposes, all key decisions and actions in the communication process were recorded, including dates of communications and names and other details of respondents.

Although extensions of the deadline for the return of responses were requested by some respondents and granted by the researcher, responses were eventually

received from four of the five selected respondents, resulting in an 80% response rate. The fifth respondent was not prepared to participate in the research. The fourth respondent omitted answers to some of the questions in the questionnaire for client confidentiality and/or auditing firm risk management reasons. The responses of this respondent were therefore included in the findings only to the extent practicable. On the basis of the nature of the questions for which responses were omitted by this respondent, the researcher does not believe the omissions to significantly impair the data provided by this respondent and the conclusions based on it in the context of the main objective of the research.

Responses were reviewed and analysed and follow-up meetings were held with all four respondents to clarify certain issues arising from the completed questionnaires, including any apparent anomalies within the same response or unexpected differences among the four responses.

The absence of a fifth response was compensated for by a review of the research findings by experienced auditors of Deloitte and the provision of their opinions thereon. This objective professional review also served the purpose of introducing an additional measure of quality control into the research findings. The reasons for selecting Deloitte for this purpose are discussed in Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*.

The experienced Deloitte auditors concerned were furnished with the following information:

- written instructions for their review (refer to Appendix H);
- a hard copy of the final questionnaire (refer to Appendix G); and
- draft hard copies of Chapter 2: *Research objective, design, method and scope*, Chapter 4: *Selected processes affecting policy liabilities and the related earnings*, Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* as at the date of the request for the review.

Comments received from Deloitte were incorporated into the research results.

The process followed in the analysis of the responses is described in the next section.

4.4 Data analysis

Quantitative and qualitative research differs in respect of the data analysis process followed. Neuman and Kreuger (2003:434-435) identify four significant differences between the data analysis processes in these two research designs:

1. Whereas quantitative research often employs standardised mathematical and statistical formulae in data analysis, the process in qualitative research is less standardised.
2. The data analysis process in quantitative research usually only commences once all data has been collected, whereas the inductive nature of qualitative research often requires the researcher to commence analysis of data while it is still being collected, as (s)he “learns” from the data.
3. Quantitative researchers often manipulate numerical data in order to test abstract hypotheses, whereas qualitative researchers create new theories by combining empirical findings and abstract concepts.
4. Qualitative research is often closer to raw data and therefore less abstract than the statistical nature of quantitative research.

As this research is of a qualitative and primarily descriptive nature, as described in Section 4.2: *Research design*, and also as the data was primarily in the form of words and not numbers, no mathematical or statistical techniques were employed in analysing the data extracted from the completed questionnaires. Instead, the researcher mainly compared the responses to each individual question on a qualitative basis and thereafter combined the responses to related questions to identify common themes and draw conclusions, resulting in the development of a best practice framework for the formulation of overall audit strategies.

As only four responses were involved, no coding of data was necessary: the researcher could work with all four completed questionnaires in front of him at all times. This removed the risk of data-coding errors, which is otherwise a common risk in qualitative research (Mouton, 2001:109).

Completed questionnaires received from respondents and comments received from Deloitte were retained on a confidential basis as documentation of the research.

5. RESEARCH SCOPE

5.1 The overall audit strategy

The objective of this research, as described in Section 2: *Research objective and value*, is the development of a best practice framework for the formulation of overall audit strategies for certain components of the financial statements of listed South African long-term insurers. It is therefore important to properly describe the term “overall audit strategy” and the context in which it is used in this research.

An audit approach, recently re-termed **overall audit strategy** in ISA 300 (Revised): *Planning an audit of financial statements* (IAASB, 2005h), is described as resulting from the planning phase of the audit, describing the “scope, timing and direction of the audit” (IAASB, 2005h:para. 9). The overall audit strategy should be documented (IAASB, 2005h:para. 22) and is often contained in a memorandum recording the main aspects relating to the planning of the audit. The purpose of the overall audit strategy is to guide the development of a detailed audit plan (IAASB, 2005h:para. 9) that sets out the nature, timing and extent of planned audit procedures to provide detailed instructions to audit staff performing the audit.

Winograd, Gerson and Berlin (2000:176) provide a practical perspective on the definition of an overall audit strategy contained in the previous paragraph. In a description of the audit approach of PricewaterhouseCoopers, they include the “methodology, technology and working practices” employed in delivering an audit. They then provide a framework consisting of eight principles describing the basic activities encompassed by the overall audit strategy, ranging from the understanding of client expectations at the commencement of the audit to evaluating performance after completion of the audit.

The view of Winograd, *et al.* (2000) is construed to be that the overall **audit strategy** is uniform across all audits of the firm (some firms use terms such as “firm audit methodology” for this item). The application of the overall audit strategy to an audit client will then result in a detailed **audit plan**, customised to the particular circumstances of each individual client.

However, if a comprehensive list of activities or steps comprising an audit engagement is considered, it is often difficult in certain areas to classify each activity or step exclusively as part of either the overall audit strategy or the audit plan. The author believes that this is a result of the existence of an element of overlap between these elements of the audit. He also believes, however, that this distinction is not of significant practical importance from the point of view of audit effectiveness, on the basis that, as long as each step or activity comprising an audit engagement is properly performed, the audit process will be complete and effective.

Against this background, for the purpose of this research, the term “overall audit strategy” and any derivations thereof have therefore been interpreted in a wide sense. Certain elements included in the scope of an overall audit strategy as discussed in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* may therefore be classified by others as part of the audit plan. This interpretation was adopted to ensure that the framework for the formulation of overall audit strategies developed in the latter chapters is as comprehensive as possible to avoid the greater risk of it being incomplete and therefore of lesser value.

5.2 Insurance contracts

The scope of the research on business and accounting processes and overall audit strategies includes all policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities. Liabilities arising under contracts that are not insurance contracts as defined and related earnings are excluded from the scope of the research.

IFRS 4 (AC 141): *Insurance contracts* defines an insurance contract as “[a] contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder” (SAICA, 2004b:Appendix A). Insurance risk is defined as “[r]isk, other than financial risk, transferred from the holder of a contract to the issuer” (SAICA, 2004b:Appendix A), whereas financial risk is defined as “[t]he risk of a possible future change in one or more of a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index or other variable...” (SAICA, 2004b:Appendix A).

Consider, for example, a pure investment-linked contract issued by a long-term insurer. The policyholder pays a single premium to the insurer. It is invested in units of a unitised investment portfolio. Upon the death of the policyholder (the insured event), the beneficiaries of the policy receive the value of the units on the date of the claim. The policyholder has not transferred any insurance risk to the insurer and retains the entire risk that investment markets may be at a lower level at the date of the claim than at the inception date of the policy. This type of pure investment contract therefore does not qualify as an insurance contract as defined, and is excluded from the scope of this research.

In the past, in the absence of authoritative financial reporting guidance as discussed in Chapter 1: *Introduction and background*, the legal form of a contract often determined its classification as an insurance contract. With the introduction of IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b), this is no longer the case. The economic substance of the contract now determines whether it is classified as an insurance contract or, alternatively, an investment contract (Ernst & Young, 2004a).

As a result, many South African pension plans (e.g. provident fund plans) previously classified as insurance contracts due to the legal nature of the policy contract, do not comply with the definition of an insurance contract in IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b), as they transfer financial risk from the policyholder (the employer company) rather than insurance risk (French, 2004:14). These contracts should be classified as investment contracts and the valuation of the liabilities under

these contracts should be in accordance with IAS 39 (AC 133): *Financial instruments: recognition and measurement* (SAICA, 2004a) instead of IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b). They are therefore excluded from the scope of this research.

In summary, this research focuses mainly on “risk products” sold by listed South African long-term insurers.

5.3 Literature review

The literature reviewed in this research generally comprised a wide range of pronouncements by local and international professional bodies, legislation, papers published in accredited research journals, articles in popular publications, authoritative textbooks on auditing and long-term insurance and relevant local and international master’s and doctoral theses and dissertations.

The guidance for auditors included in the literature reviewed was limited to guidance available in South Africa, the United Kingdom, Canada, Australia, New Zealand and the United States of America. The auditor believes the abovementioned international environments to bear the closest similarity to the South African environment, and the available guidance therefore to be the most relevant and useful in the South African context. Table 2-2 contains a summary of the relevant guidance currently available in these countries.

Table 2-2: Summary of relevant auditing guidance issued in Australia, Canada, New Zealand, SA, the UK and the USA as at 28 February 2005

ISSUER	TITLE	YEAR OF ISSUE*
<u>Australia</u>		
AARF (Australian Accounting Research Foundation)	AUS 524: <i>The auditor's use of the work of the actuary and the actuary's use of the work of the auditor in connection with the preparation and audit of a financial report</i>	2002a
AARF (Australian Accounting Research Foundation)	AUS 606: <i>Using the work of an expert</i>	2002b
<u>Canada</u>		
CICA (Canadian Institute of Chartered Accountants)	Section 5365: <i>Communications with actuaries</i>	1991
CICA (Canadian Institute of Chartered Accountants)	AUG-15: <i>Audit of actuarial liabilities of life insurance enterprises</i>	1993
CICA (Canadian Institute of Chartered Accountants)	Section 5049: <i>Use of specialists in assurance engagements</i>	2002
<u>New Zealand</u>		
ICANZ (Institute of Chartered Accountants of New Zealand)	Auditing Standard No. 606: <i>Using the work of an expert</i>	1998b
<u>South Africa</u>		
SAICA (South African Institute of Chartered Accountants)	<i>Audit guide on long-term insurance</i>	1998a
SAICA (South African Institute of Chartered Accountants)	<i>The auditor's relationship with the statutory actuary in the long-term insurance industry</i>	1998b
PAAB (Public Accountants' and Auditors' Board)	SAAS 620: <i>Using the work of an expert</i>	1998
IAASB (International Auditing and Assurance Standards Board)	ISA 620: <i>Using the work of an expert</i>	Effective 2005I
<u>United Kingdom</u>		
APB (Auditing Practices Board)	SAS 520: <i>Using the work of an expert</i>	1995
APB (Auditing Practices Board)	PN 20: <i>The audit of insurers in the United Kingdom</i>	1999
<u>United States of America</u>		
AICPA (American Institute of Chartered Public Accountants)	AU Section 336: <i>Using the work of a specialist</i>	1994
AICPA (American Institute of Chartered Public Accountants)	<i>Life and health insurance entities - AICPA audit and accounting guide</i>	2003

* Where relevant, the letter following the year in this column correlates to the related reference in the source list at the end of the dissertation.

5.4 Questionnaire to identify elements of financial statements potentially exposed to a high level of inherent risk

For the analysis of the assessment of inherent risk by the auditors of long-term insurers (point 2 in Section 3: *Overall research design and method*), the questionnaire was sent to the experienced auditors responsible for the audits of all nine companies listed in the Life Insurance sector of the JSE Securities Exchange South Africa on 29 October 2003 (for details, refer to Table 2-3 in Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*). The findings from and results of this questionnaire were used to prove that the focus and scope of the remainder of this research, namely policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities, are justified.

5.5 Questionnaire to identify processes and obtain information regarding overall audit strategies

As discussed in Chapter 1, Section 2.1: *The South African long-term insurance industry*, the industry is characterised by the dominance of a small number of large companies. It is evident from Tables 1-1 and 1-2 in the abovementioned section, that 79% in 2000 and 88% in 2003/2004 of the total assets of the industry are owned by, and 79% (in 2000 – more recent comparable information is not available) of the premium income of the industry generated by, the following South African long-term insurers:

- Old Mutual Plc
- Sanlam Limited
- Liberty Group Limited
- Momentum Life Limited (subsidiary in the FirstRand Limited group)
- Metropolitan Life Limited (subsidiary in the Metropolitan Holdings Limited group).

Research by Ernst & Young (2004b) also indicated that, during their 2003/2004 financial years, the abovementioned insurers comprised 95% of the embedded value of the nine listed long-term insurers (refer to Table 1-2 in Chapter 1, Section 2.1: *The South African long-term insurance industry*).

Given the very significantly dominant size of these companies in the industry and the fact that they are considerably larger than the insurers comprising the remainder of the industry, meaningful conclusions applicable to the audit of all listed South African long-term insurers can be drawn by restricting the scope of the research to these five companies.

The number of auditing firms capable of providing audit services to large companies such as the abovementioned South African long-term insurers has reduced from eight in the 1980s to the current four. This reduction was a result of various mergers and consolidations and the dissolution of Arthur Andersen LLP in 2002 following the Enron debacle (GAO, 2003:1). The “Big Four” currently considered capable of providing such services in South Africa are Ernst & Young, KPMG Inc., PricewaterhouseCoopers Inc. and Deloitte.

Table 2-3 indicates the current auditors of the nine companies listed in the Life Insurance sector of the JSE Securities Exchange South Africa on 29 October 2003.

Table 2-3: Listed South African long-term insurers and their auditors as at 29 October 2003

Company	Auditor(s)
Old Mutual Plc	KPMG Inc.
Sanlam Ltd	Ernst & Young and PricewaterhouseCoopers Inc.
Liberty Group Ltd	PricewaterhouseCoopers Inc.
Metropolitan Holdings Ltd	PricewaterhouseCoopers Inc.
Capital Alliance Holdings Ltd	PricewaterhouseCoopers Inc.
African Life Assurance Company Ltd	PricewaterhouseCoopers Inc.
Rentsure Holdings Ltd	KPMG Inc.
Sage Group Ltd	KPMG Inc. and Grant Thornton
Clientele Life Ltd	PricewaterhouseCoopers Inc.

(Sources: Financial Mail, 2004 and Dixon, 2003)

It is evident from Table 2-3 that all listed South African long-term insurers are audited by only four auditing firms, three of which are amongst the abovementioned “Big Four” firms. The FirstRand Limited Group, of which Momentum Life Limited forms part, is also audited by PricewaterhouseCoopers Inc. Therefore, by selecting the abovementioned five companies for inclusion in this part of the research, all auditing

firms responsible for the audits of listed South African long-term insurers are included in the research, except Grant Thornton.

As the latter jointly audits Sage Group Ltd with KPMG Inc., it can be expected that the two firms will employ a similar, mutually acceptable overall audit strategy to the audit of a long-term insurer. Grant Thornton can therefore be expected to have submitted a response to the questionnaire similar to that of KPMG Inc., had it been included. The response by KPMG Inc. was therefore treated as a substitute for a response by Grant Thornton.

Consideration was also afforded to the fact that three of the potential five respondents are audit partners in the same auditing firm, namely PricewaterhouseCoopers Inc. (the auditor of Metropolitan Holdings Limited, Liberty Group Limited and Momentum Life Limited). The potential argument that a particular firm applies the audit methodology of the firm consistently to all audits of the particular firm, and that therefore, the abovementioned respondents would necessarily provide similar responses to questions in the questionnaire, was considered. This, in turn, might result in bias in the research results towards the audit methodology of the particular firm.

The abovementioned bias was avoided in this research by asking respondents for their individual views as experienced auditors, on various pertinent aspects of overall audit strategies for insurance contracts and the related earnings, as opposed to asking respondents to provide information on the actual overall audit strategies employed on their selected audit clients. This approach is evident from the nature of the vast majority of questions in the questionnaire in Appendix G. The approach therefore required respondents to express their personal views as individuals, as opposed to being forced to merely reiterate their application of the audit methodology of their auditing firm. This research method is supported by Bradburn and Sudman (1979:15) and De Vaus (1996:101).

The questionnaires were therefore sent to the experienced auditors responsible for the audits of the abovementioned five long-term insurers for completion. As explained in Section 4.3: *Data collection*, responses were received from four of the

five potential respondents. The absence of a fifth response was compensated for by a review of the research findings by experienced auditors of Deloitte and the provision of their opinions thereon. These opinions were incorporated into the research results, as detailed in the abovementioned section.

Deloitte was selected to provide this review on the basis of the fact that, although it is not the auditor of any listed South African long-term insurer, it is the auditor of 13 of the 78 long-term insurers registered with the Financial Services Board as at 28 January 2005 (derived from Langenhoven, 2005). No firm other than the other three members of the “Big Four” is the auditor of more than four of the abovementioned 78 companies. Deloitte can therefore reasonably be assumed to have the required knowledge and expertise to provide such review and to be in the best position to provide it. The inclusion of Deloitte in the research in this manner results in coverage of opinions of experienced auditors of all of the abovementioned “Big Four” firms.

On the basis of the dominance of the auditing firms included in this research in the audit market for listed South African long-term insurers, the conclusions in the research are believed to be applicable to the audit of all listed South African long-term insurers, and probably, to a significant extent, to the audit of smaller, non-listed South African long-term insurers.

5.6 Other

5.6.1 Audit opinions on regulatory returns

Section 301(1) of the Companies Act No. 61 of 1973 (South Africa, 1973) requires the auditor of any South African company (including a long-term insurer) to express an audit opinion on the financial statements of the company. Section 19(7)(a) of the Long-Term Insurance Act No. 52 of 1998 (South Africa, 1998a) places an additional responsibility on the auditor of a South African long-term insurer, namely to express an audit opinion on certain parts of the regulatory returns (as described in section 36 of the abovementioned Act) of the insurer to the Registrar of Long-Term Insurance.

A degree of overlap exists between the overall audit strategies employed by the auditor to enable the expression of an audit opinion on the financial statements of a South African long-term insurer and on its regulatory return, but the strategies are not necessarily identical.

The elements of overall audit strategies included in this research exclude those specifically designed to enable the auditor to express an opinion on the regulatory return and include only those required to enable the auditor to express an opinion on the financial statements of the insurer.

5.6.2 Audit opinions on interim financial reports

IAS 34 (AC 127): *Interim financial reporting* (SAICA, 1998c) contains the financial reporting requirements applicable in situations where companies issue interim financial reports. Auditors may be required to provide assurance on these reports.

Although a significant degree of overlap might exist between the overall audit strategies employed by the auditor to enable the provision of assurance on the interim financial report of a South African long-term insurer and on its annual financial statements, the scope of this research excludes elements of the overall audit strategy specifically designed to enable the provision of assurance on interim financial reports.

6. CONCLUSION

The objective of this research and its value were described in this chapter. The overall research design and method were discussed. Thereafter, the design of and method employed in the part of the research focused on overall audit strategies were described and classified. A detailed description of the scope of the various elements of the research concluded the chapter.

The findings of and conclusions arising from the research described in this chapter are documented in the remainder of the chapters of this dissertation.

The next chapter contains the results of the research conducted to identify high inherent risk elements in the financial statements of listed South African long-term insurers.

CHAPTER 3
HIGH INHERENT RISK INDUSTRY-SPECIFIC ELEMENTS IN FINANCIAL
STATEMENTS OF LISTED SOUTH AFRICAN LONG-TERM INSURERS

	Page
1. OVERVIEW	80
2. INTRODUCTION AND RESEARCH OBJECTIVE	80
3. RESEARCH DESIGN AND METHOD	83
4. LITERATURE REVIEW	86
4.1 The concept of “inherent risk”	86
4.2 Aspects relevant to accounting and disclosure by listed South African long-term insurers	93
4.3 Aspects relevant to the audit of listed South African long-term insurers	94
5. INDUSTRY-SPECIFIC SIGNIFICANT ACCOUNT BALANCES AND OTHER ELEMENTS	96
6. HYPOTHESES	98
6.1 Nature of the asset, liability or transaction	99
6.2 History of errors	99
6.3 Complexity of transactions	99
6.4 Degree of judgement involved	100
6.4.1 <i>Policy liabilities</i>	101
6.4.2 <i>Earnings from long-term insurance activities</i>	101
6.5 Unusual (non-routine) transactions	102
6.6 Risk of fraud	104
6.7 Materiality	104
6.8 Exposure to volatility in economic factors	104
6.9 Formulation of hypotheses	105
7. EMPIRICAL STUDY AND RESULTS	105
7.1 Overall results	105
7.2 Earnings	108
7.3 Policy benefits	109
8. CONCLUSION	110

LIST OF TABLES

	Page
Table 3-1: Listed long-term insurers of which the financial statements were reviewed	97
Table 3-2: Relative Inherent Risk Index per account	107

1. OVERVIEW

The research undertaken to identify the industry-specific elements of the financial statements of listed South African long-term insurers potentially exposed to the highest levels of inherent risk (refer to Chapter 2, Section 3: *Overall research design and method*) is documented in this chapter.

A comprehensive description of the research objective and the design and method employed in this part of the research, including its scope, is followed by a summary of the relevant literature reviewed. In the next section, account balances and classes of transactions specific to the long-term insurance industry are identified. A discussion of the development of the two hypotheses formulated for this part of the research is followed by the results of the empirical study undertaken.

2. INTRODUCTION AND RESEARCH OBJECTIVE

In 2000 the Auditing Standards Board of the American Institute of Certified Public Accountants conducted a survey entitled *Fraud-Related SEC Enforcement Actions Against Auditors: 1987 – 1997* (Beasley, Carcello & Hermanson, 2001:63). It focused on instances where auditors failed to identify client fraud by means of the audit process and attempted to identify reasons for such failure. In 44% of the 45 cases surveyed, improper audit planning was identified as the reason for the failure. An element of audit planning that was specifically cited was a failure to “properly assess inherent risk and adjust the audit program accordingly” (Beasley, *et al.*, 2001:64).

Although the abovementioned survey focused specifically on the failure of the audit to detect fraud, the results could well be applied to other deficiencies in the audit of financial statements.

Monroe and Juliana (2000:154) support the notion that the result of an under-estimation of inherent risk could be an ineffective audit, increasing the potential of legal liability for the auditor.

International Standards on Auditing, also applicable in South Africa, require the auditor of an entity (the auditee) to assess audit risk and subsequently to design audit procedures to reduce this risk to an acceptable level (IAASB, 2005k:para. 2). Audit risk should be assessed for each assertion related to each material account balance or class of transactions contained in financial statements. The higher the audit risk related to the assertions in a particular account balance or class of transactions, the more extensive the audit procedures required to reduce audit risk for the particular account balance or class of transactions to an acceptable level.

Audit risk comprises three components, namely inherent risk, control risk and detection risk (IAASB, 2005g:Appendix para. 20-23). **Inherent risk** describes the susceptibility of an account balance and the different assertions related to it to material misstatement, assuming that no internal controls exist. **Control risk** refers to the risk that a material misstatement may not be prevented or detected and corrected by an auditee's internal controls, whereas **detection risk** is the risk that an auditor's audit procedures will not reveal a material misstatement (IAASB, 2005g:Appendix para. 20-23).

Both inherent and control risk are the auditee's risks that exist independently of the audit, and are therefore not controllable by the auditor - they are exogenous to the audit (Bloomfield, 1995:71; Boynton, *et al.*, 2001:296; IAASB, 2005g:Appendix para. 21; Riley, 1986:72). The auditor can merely assess these pre-existing risks as input into the assessment of audit risk. Whereas the nature and quality of internal controls differ amongst entities, many factors affecting inherent risk are generic to all companies. Cash, for example, in almost any company is by its nature of being highly desirable and movable, exposed to a high risk of theft, irrespective of the type of business of the company or the industry in which it operates (PAAB, 1996b:para. .09). Due to the generally more audit client-specific nature of control risk as opposed to the generally more generic nature of inherent risk, the focus of the part of the research documented in this chapter is on inherent risk.

Previous research on inherent risk as element of the audit risk model included the following aspects:

- Analytical properties of the audit risk model (Cushing & Loebbecke, 1983).

- The process of assessing inherent risk (Bedard & Graham, 2002; Monroe & Juliana, 2000; Bloomfield, 1995; Braun, 1995; Kinney, 1989; Peters, Lewis & Dhar, 1989; Daniel, 1988; Riley, 1986).
- The assessment of inherent risk in archival studies (Waller, 1993; Houghton & Fogarty, 1991).
- The interdependencies between the elements of the model, including inherent risk and control risk (Hitzig, 2001; Dusenbury, Reimers & Wheeler, 2000; Marden, 1995; Haskins & Dirsmith, 1993).

Standard setters and academics in the accounting profession have conducted extensive research on internal controls and control risk (Houghton & Fogarty, 1991:1), as well as on the interdependencies between inherent and control risk. However, very little research has been done on the **identification** of inherent risk (Bedard & Graham, 2002:40; Braun, 1995:11; Houghton & Fogarty, 1991:2; Johnson, 1987:124; Riley, 1986:42). This is also the reason why some of the references in the previous paragraph range back to the 1980s. The strong focus of the role of internal controls and control risk as components of sound corporate governance and the requirements for both management and auditors to report on the quality of internal financial controls contained in the Sarbanes-Oxley Act and related regulations affecting auditors in the United States of America but also worldwide, have focused more recent research on internal control and control risk rather than inherent risk.

Haskins and Dirsmith (1993:79) believe that a more robust development and articulation of the concept of inherent risk through proper research may make it possible for auditors to rely thereon under favourable conditions. This, in turn, will facilitate audit efficiency without compromising audit quality. Riley (1986:11) believes that a need exists for a technique that assists auditors to assess inherent risk in a more analytical manner and concludes that her research provides strong support for the benefits of using such a technique for evaluating inherent risk. Monroe and Juliana (2000:154) and Peters *et al.* (1989:360) infer that although the identification and assessment of audit risk is only one of several judgements the auditor makes during an audit, it is the first in the determination of audit risk and, by implication, one of the most important. Furthermore, a study by Daniel (1988:180) concludes that more research on risk assessments by auditors is required to assist auditors in the

practical application of the audit risk model and, by implication, the element of inherent risk. Research by Braun (1995) (discussed in Section 4.1: *The concept of “inherent risk”*) addresses Daniel’s conclusion by focusing on the process of the assessment of inherent risk at the assertion level.

As mentioned in Chapter 1, Section 2.1: *The South African long-term insurance industry*, the demutualisation and listing of two of the largest South African long-term insurers, Old Mutual Plc and Sanlam Ltd, in the late 1990s, sparked renewed interest in and reliance on the financial statements of these groups. The auditors of South African long-term insurers in turn face increased reliance on their audit opinions on these entities and should ensure that they perform efficient and effective audits of the financial statements of these companies. A crucial element thereof is the proper assessment of the inherent risks related to these financial statements and the account balances, classes of transactions and disclosures contained in them.

The need for revision of the existing *Audit Guide on Long-Term Insurance* (SAICA, 1998a) and related guidance issued by SAICA in 1998 is discussed in Chapter 2, Section 2: *Research objective and value*. The guidance, for example, identifies a number of “higher risk areas” in the audit of long-term insurers without properly associating all of these “areas” with significant accounts and assertions exposed to a high level of inherent risk (SAICA, 1998a:19-22).

The objective of this part of the research was therefore to identify those industry-specific elements of the financial statements of listed South African long-term insurers that are potentially exposed to the highest level of inherent risk. This was accomplished by following the method described in the next section.

3. RESEARCH DESIGN AND METHOD

Chapter 2, Section 3: *Overall research design and method* contains a brief summary of the research design and method applied in this part of the research, placing it in context to the remainder of the research. The research design and method employed in this particular part of the research is discussed in more depth below.

- (a) A literature review was conducted of previous local and international research on the topic of inherent risk, as well as of accounting and disclosure by and the audit of long-term insurers. The aim of the review was to provide a sound basis for the application of the concept of inherent risk in the further stages of the research. In particular, factors that might potentially impact on inherent risk at the account and assertion level (as opposed to the financial statement level) were identified from previous research.
- (b) Financial statements of listed South African long-term insurers were reviewed to identify the significant accounts that are specific to this industry (i.e. not pervasive to all industries) (industry-specific). Although one or more non-industry-specific elements of the financial statements of a particular South African long-term insurer may be exposed to a high level of inherent risk due to the specific circumstances of the particular insurer, these elements fall outside the scope of this research, as they:
- are not applicable to all South African long-term insurers, or
 - also apply to companies in other industries, whereas the focus of this research is solely on the long-term insurance industry.
- (c) An empirical study was conducted by means of a questionnaire sent to the audit executives responsible for the audits of the nine companies listed in the Life Insurance sector of the JSE Securities Exchange South Africa as at 29 October 2003 (also refer to Chapter 2, Section 5.4: *Questionnaire to identify elements of financial statements potentially exposed to a high level of inherent risk*). These companies are:
- African Life Assurance Company Ltd
 - Capital Alliance Holdings Ltd
 - Clientele Life Ltd
 - Liberty Group Limited
 - Metropolitan Holdings Ltd
 - Old Mutual Plc (as the South African long-term insurance operations are conducted in an unlisted subsidiary of the listed company, namely Old Mutual Life Assurance Company (South Africa) Limited, the respondents selected were the experienced auditors of this subsidiary)

- Rentsure Holdings Ltd
- Sage Group Ltd
- Sanlam Limited.

The questionnaire required respondents to assess inherent risk for each assertion related to each of the industry-specific account balances and classes of transactions identified in (b) above on the basis of each of the factors impacting on inherent risk, as identified in (a) above. Appendix I contains a copy of the questionnaire. The questionnaire was reviewed by a knowledgeable independent party for quality control purposes prior to distribution to respondents.

Responses were analysed as described in Section 7: *Empirical study and results* to identify the significant accounts and other elements that are potentially exposed to the highest level of inherent risk.

Riley (1986:16) developed a relatively complex technique called the “inherent audit risk-index approach or technique” on the basis of her research. This technique is based on the application of the well-known Analytic Hierarchy Process used in decision making (Riley, 1986:6) in an auditing context. Although Riley’s technique was evaluated as a potential research instrument for this research, it was decided to develop a simpler instrument for this research for the following reasons:

- Riley’s technique was regarded as unnecessarily complex for achieving the objective of this research.
- The inherent audit risk-index approach combines the elements of inherent risk and control risk, whereas this research focuses only on inherent risk as described in Section 2: *Introduction and research objective*.
- Riley’s technique addressed inherent risk at the financial statement level only, whereas this research focuses only on inherent risk at the account and assertion level.

The simplified instrument developed in this research, namely the Relative Inherent Risk Index, is described in Section 7: *Empirical study and results*.

4. LITERATURE REVIEW

4.1 The concept of “inherent risk”

The introduction to this chapter mentions that failure to properly assess inherent risk is a major contributing factor to inefficient and ineffective audits and, as such, has been a contributing factor in previous audit failures. Johnson (1987:125) concludes that inherent risk evaluation is an important part of audit planning. His view is supported by Houghton and Fogarty (1991:3), who indicated that the assessment of inherent risk is significantly more important in assessing the risk of material misstatement in financial statements than had been recognised previously. They base their conclusion on research conducted in the United States of America, the United Kingdom and South Africa in 1991, which revealed the concern of audit partners that areas of financial statements containing errors that required adjustments subsequent to the audit were not timeously and properly identified during audit planning.

Inherent risk is described in a number of different ways in auditing standards and literature (refer to, *inter alia*, Hitzig, 2001; Houghton & Fogarty, 1991:2; Kinney, 1989:69; IAASB, 2005g:Appendix para. 20, Whittington & Pany, 2004:128; Puttick & Van Esch, 2003:112 and Knechel, 2001:88). O'Regan interprets it widely as the “gross risk ... that items in the financial statements are misstated” (O'Regan, 2004:139) “before the application of risk management procedures” (O'Regan, 2004:131). More directly applied to the audit, Hitzig (2001:54) interprets it as “an auditor’s impression of susceptibility to misstatement to form the basis for reasonable assurance, even though no audit procedures have been performed.” Kinney (1989:69) and Knechel (2001:61) support this view, but add a dimension of materiality. They define inherent risk as the risk that, in the absence of controls, an error at least equalling materiality might occur. The description of inherent risk offered by Whittington and Pany (2004:128) effectively combines those of Hitzig, Kinney and Knechel.

More formally, the IAASB (2005g:Appendix para. 20) describes inherent risk as “the susceptibility of an assertion to misstatement that could be material ... assuming that there are no related controls.” This definition clearly relates the risk of misstatement to an assertion rather than merely an entire account balance or class of transactions. The inference from this is that inherent risk should be assessed (and could therefore differ) for each assertion related to each significant account balance or class of transactions. This view is supported by, *inter alia*, Boynton *et al.* (2001:172 and 295), Braun (1995:14), Houghton and Fogarty (1991:2), Knechel (2001:333), Puttick and Van Esch (2003:141) and Whittington and Pany (2004:128).

During the planning phase of the audit, the auditor assesses inherent risk for a number of reasons, including:

- Identifying areas of the client’s business that are exposed to a high risk of material misstatement in the financial statements in order to place **increased audit emphasis** on these and, in doing so, manage audit risk more effectively and efficiently. Dusenbury, *et al.* (2000:105) describe this as “balancing the trade-offs between efficiency and effectiveness in audits”.
- Determining the **scope of and approach to the audit** (Houghton & Fogarty 1991:1). According to Shaun F. O’Malley, former head of Pricewaterhouse-Coopers, you first “evaluate risk; then you develop an audit program to focus on high-risk areas” (Tie, 2000:20).
- **Managing the risk of loss** from engagements by pricing the audit in such a way that audit fees reflect the risk of material misstatements in a client’s financial statements (Bedard & Graham, 2002:39).
- Providing a **means of communication** among audit team members by focusing them on the key issues within a client’s business and financial statements (Bedard & Graham, 2002:40).
- Providing a **context** within which audit evidence gathered during the execution phase of the audit may be understood and evaluated in terms of sufficiency and appropriateness (Bedard & Graham, 2002:40).

ISA 315: *Understanding the entity and its environment and assessing the risks of material misstatement* (IAASB, 2005k:para. 30-32) discusses the important

relationship between inherent risk as a component of the risk of material misstatement of the financial statements, and business risk. Business risk is described as resulting “from significant conditions, events, circumstances, actions or inactions that could adversely affect the entity’s ability to achieve its objectives and execute its strategies, or through the setting of inappropriate objectives and strategies.” Business risk provides a useful platform for the identification of inherent risk. The ambit of business risk is, however, much wider than that of inherent risk, as the latter focuses only on the risk of material misstatement of the financial statements. It follows that:

- all inherent risks are also business risks, but
- all business risks are not also inherent risks – only those business risks that may potentially result in material misstatement of the financial statements are also inherent risks.

It is stated in the introduction to this chapter that inherent risk is exogenous to the audit. All financial statements contain a higher or lower degree of risk of material misstatement. These misstatements may be unintentional (errors) or intentional (fraud), and may affect either the rand value of the account (quantitative), or its disclosure (qualitative).

The exogenous nature of inherent risk implies that the auditor cannot **change** inherent risk. During the planning stage of the audit, (s)he can do no more than **assess** the factors that affect inherent risk for the financial statements as a whole, as well as for each assertion related to each material account balance, class of transactions and disclosure, using quantitative and/or qualitative measures. Houghton and Fogarty (1991:2) indicate that the assessment of inherent risk is an effective step in the audit planning process, and that an auditor with a sound understanding of the client’s business is able to perform this step with relative ease. Peters, *et al.* (1989:363), however, conducted interviews with auditors and discovered that identifying specific characteristics of accounts that might increase the risk associated with the account is one of the tasks that auditors found to be difficult.

It is important to be mindful of the fact that the mere presence of an inherent risk factor does not imply that the related account balances and assertions are materially

misstated. It merely indicates that the risk of misstatement in the particular account balance and assertion is higher than it would have been if the inherent risk factor were not present (Knechel, 2001:333).

In this part of the research that focuses on inherent risk, it is assumed that inherent risk is assessed separately from control risk. Until the recent past, some auditors chose to conservatively assume that inherent risk is always at a maximum (or 100%) (Boynton, *et al.*, 2001:296; Daniel, 1988:175; Hitzig, 2001:54; Puttick & Van Esch, 2003:112). This method was allowed by SAAS 400: *Risk assessments and internal control* (PAAB, 1996b:para. .08). It takes into account the fact that interdependency exists between inherent risk and control risk. Research by, *inter alia*, Marden (1995:62) yielded proof of the existence of such dependency. Proponents of the abovementioned approach suggest that it ensures that the combined assessment of inherent and control risk is not underestimated, which could result in an ineffective audit.

Haskins and Dirsmith (1993:79), in contrast, conclude that this approach could result in an over-estimation of the abovementioned combined risk, thus resulting in an inefficient audit. This conclusion is supported by ISA 315: *Understanding the entity and its environment and assessing the risks of material misstatement* that requires auditors of all entities to assess the risk of material misstatement at financial statement as well as at account balance and assertion level (IAASB, 2005k:para. 100), effectively disallowing the conservative approach described in the previous paragraph. The latter auditing standard is effective for audits of financial statements for periods commencing on or after 15 December 2004.

Inherent risk exists and should be assessed as follows:

- at the level of the financial statements as a whole (financial statement level); and
- at the level of individual assertions related to each material account balance, class of transactions and disclosure (account/assertion level) (IAASB, 2005k:para. 100).

Inherent risk at the **financial statement level** comprises risks that are pervasive to all account balances, classes of transactions and disclosures, and often relates to the

inherent nature of the client and its business, as well as to the industry, markets and environments in which it operates (Whittington & Pany, 2004:128; Puttick & Van Esch, 2003:141). Examples of inherent risks at this level are risks relating to the continued existence (going concern) of an entity. Inherent risk assessments at this level are used to decide whether the auditor should retain a client on the basis of its risk profile, and also to provide an overall perspective on inherent risks at account balance level (Peters, *et al.*, 1989:361).

Inherent risk at the financial statement level is excluded from the scope of this research. As indicated in Chapter 2: *Research objective, design, method and scope*, the focus of this research is on inherent risks at the **account/assertion level** within listed South African long-term insurers. This focus is practicable and appropriate, as:

- Peters, *et al.* (1989:367) and Braun (1995:14) found strong evidence that auditors ultimately perform assessments of inherent risk at **account** level;
- Elliott, in describing certain aspects of the Peat Marwick International audit strategy, mentions that assessments of inherent risk in practice is related to specific **assertions** (Elliott, 1983:4); and
- Braun (1995:19) infers that making inherent risk assessments at the **account/assertion level** is desirable as it allows a more efficient and effective allocation of resources to high-risk areas on the audit.

SAAS 400: *Risk assessments and internal control* (PAAB, 1996b:para. .09) stated that inherent risk at the account/assertion level is potentially affected by a number of factors, which include the following:

- The nature of the asset, liability or transaction reflected in the account (cash, for example, is exposed to a higher risk of theft (the existence assertion) than is property).
- History of errors in the account.
- The complexity of transactions reflected in the account.
- The degree of judgement involved in determining the account balance.
- The inclusion of unusual transactions not subject to routine processing in the account, particularly near period end (the frequency of transactions). This factor

encompasses the experience level of client staff members involved in processing entries to the account (Houghton & Fogarty, 1991:2).

ISA 315: *Understanding the entity and its environment and assessing the risks of material misstatement* (IAASB, 2005k:para. 109) adds the following factors to the above list:

- The risk of fraud contained in the account balance, class of transactions or disclosure.
- The materiality of the account balance and risk of misstatement contained in it (confirmed by Puttick & Van Esch, 2003:141), including the number of transactions (Knechel, 2001:334).

Whittington and Pany (2004:129) introduce the following factors in addition to those above:

- Account balances or transactions that are difficult to audit. (This factor is related to detection risk rather than to inherent risk and is therefore not used as an indicator of inherent risk in this research).
- Valuations that vary significantly in accordance with variances in economic factors.

Research by Johnson (1987), Mock and Wright (1999:62), and Messier and Austen (2000:124) supports the factors mentioned above.

In summary, the following important characteristics of inherent risk have been identified:

- It is assessed during the planning phase of the audit.
- It is exogenous to the audit.
- It exists at both the financial statement and account/assertion levels.
- Elements of financial statements possess inherent characteristics (indicators of inherent risk) that should be considered by the auditor in assessing inherent risk.

Research by Kinney and Waller on the assessment of inherent risk in the early 1990s indicated that some reasons exist to expect similarity in risk assessments amongst

the assertions within a particular account (Braun, 1995:18). However, Braun's research identified the following reasons to expect differences in inherent risk assessments of different assertions within an account (Braun, 1995:19):

- a desirability to differentiate inherent risk assessments for audit efficiency reasons; and
- variability in the frequency of misstatements detected amongst the different assertions within a particular account, indicative of variations in the risk of material misstatement relating to the different assertions.

He investigated three possible explanations for dependence in inherent risk assessments amongst assertions within a particular account, namely:

- The use of the same substantive audit procedures to address the detection risk relating to the assertions involved (termed "procedure jointness") (Braun, 1995:21).
- The "most important assertion heuristic". Auditors sometimes identify the most important assertion for an account balance and assess inherent risk for this assertion. The assessment of inherent risk for the remainder of the assertions related to the account balance is thereafter dependent on or derived from the assessment for the most important assertion (Braun, 1995:30).
- Auditors placing stronger emphasis of inherent risk factors at the financial statement level than at the account/assertion level in their assessment of inherent risk, resulting in similar risk assessments for all assertions related to an account balance (termed the "general factor focus") (Braun, 1995:32).

None of the potential explanations for dependency in the previous paragraph received significant empirical support in Braun's study (Braun, 1995:67). Furthermore (and possibly more importantly), Braun (1995:66) did not find significant evidence of similarity amongst the inherent risk assessments of different assertions relating to an account.

On the basis of Braun's findings, this research assumes that no significant reason exists to expect a dependency between the assessments of inherent risk for each of

the assertions related to policy liabilities and the related earnings by auditors of South African long-term insurers.

4.2 Aspects relevant to accounting and disclosure by listed South African long-term insurers

Chapter 1, Section 2.1: *The South African long-term insurance industry* describes how the demutualisation and listing of Sanlam Ltd and Old Mutual Plc in the late 1990s turned the spotlight onto financial reporting by listed South African long-term insurers.

The influences of policyholders and shareholders as stakeholder groups in South African long-term insurers are described in Chapter 1, Section 2.2.2: *Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers*. These stakeholder influences on the business underline the importance to users of fair presentation of (1) policy liabilities arising under insurance contracts and (2) the related earnings from long-term insurance activities as elements of the financial statements.

The complexity of accounting for and the presentation of long-term insurance activities in the financial statements of long-term insurers is explained in Chapter 1, Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*. In order to properly assess the inherent risks related to the financial statements of a long-term insurer, the auditor of a long-term insurer requires sound knowledge of the economy and industry, as well as of the specific business of the insurer (including product types and characteristics) and actuarial issues. This conclusion is supported by the *Audit Guide on Long-Term Insurance* (SAICA, 1998a:1), which states that auditors should undertake audits of long-term insurers only after careful consideration of their own competence. Auditors of long-term insurers should have a proper understanding of, *inter alia*, the accounting methods peculiar to the long-term insurance business.

A review of local and international accounting guidance documented in Chapter 1, Section 2.2.2: *Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers* identified the

following main accounts and groups of accounts internationally considered to be industry-specific to the long-term insurance industry:

- premiums and claims (policy benefits);
- reinsurance;
- investment revenues (income and realised and unrealised gains and losses);
- policy liabilities (including participating benefits);
- assets (investments);
- income tax; and
- commission and other new business costs or acquisition costs, and the deferral thereof.

4.3 Aspects relevant to the audit of listed South African long-term insurers

The stronger focus of users on the financial statements of listed South African long-term insurers increases the importance of an appropriate audit opinion on these statements. In order to express an appropriate audit opinion, the auditor needs to focus audit procedures on elements of the financial statements that are exposed to a high level of risk of material misstatement. As mentioned earlier in this chapter, the identification of these elements commences with an assessment of the inherent risk of the various elements of the financial statements.

The *Audit Guide on Long-Term Insurance* (SAICA, 1998a:para. .50) lists areas of concern relating to inherent risk at both financial statement and account/assertion level that the auditor should consider. Those related to the account/assertion level, which is the focus of this research, include the following:

- Details of classes of business (policy types) written (these details relate to the nature of the liability reflected in the account).
- Details of assets (investments) that back liabilities to policyholders.
- Characteristics of policyholders.
- Premium and decrement (policy movement) experience.
- Commission and administrative expenses structure.
- Actuarial valuation basis and related assumptions (no reasons for this statement are provided in the guide – it is explored in Section 6: *Hypotheses*).

The abovementioned guide also identifies the following as potential “higher risk areas” in the audit process (SAICA, 1998a:para. .62-.76). Only **inherent risk** exposures at the **account/assertion level** are listed below, since inherent risks at the financial statement level, as well as control risk and detection risk, fall outside the scope of this research:

- Actuarial valuation.
- Commission-account debit balances arising where commission has been “clawed back” from an intermediary, for example where a policy has lapsed shortly after inception.
- Premium debit and credit balances arising where premiums are in arrears or have been billed in advance.
- Control accounts.
- Completeness of reinsurance.

The abovementioned areas are supported by the indicators of inherent risk identified in Section 4.1: *The concept of “inherent risk”*.

Although the author does not disagree with the list of higher-risk areas provided in the abovementioned guide, he believes that they require reconsideration, as the guide was drafted in the period prior to the demutualisation and listing of Sanlam Ltd and Old Mutual Plc. Being two of the largest South African long-term assurers, they collectively comprised 74% of the market capitalisation of the Life Insurance sector of the JSE Securities Exchange South Africa as at 29 October 2003 (Financial Mail, 2003a:28-42 and Financial Mail, 2003c:71), resulting in an increased interest from shareholders in the earnings from long-term insurance activities as described above. The demutualisations and listings may have altered the inherent risk indicators relevant to South African long-term insurers significantly.

Significant account balances and classes of transactions specific to South African long-term insurers are identified in the next section.

5. INDUSTRY-SPECIFIC SIGNIFICANT ACCOUNT BALANCES AND OTHER ELEMENTS

As mentioned in point (b) in Section 3: *Research design and method*, the objective of this step in the research was to identify those significant account balances and classes of transactions contained in the financial statements of listed South African long-term insurers that are specific to these companies (i.e. account balances and classes of transactions that do not appear in the general purpose financial statements of companies in other industries). Account balances and classes of transactions that contain a high risk of material misstatement are designated as being “significant”.

To accomplish this, a direct comparison between the disclosure requirements contained in IAS 1: *Presentation of financial statements* (IASB, 2004a) (IAS 1) and AC121: *Disclosure in the financial statements of long term insurers* (SAICA, 1994) was initially attempted. It was found, however, that this comparison did not yield meaningful results, because the latter deals only with a number of particular aspects of the financial statements of South African long-term insurers, and it does not provide a comprehensive example of financial statements comparable to those contained in IAS 1.

Furthermore, AC 121 (SAICA, 1994) has been withdrawn for financial periods commencing on or after 1 January 2005, as discussed in Chapter 1, Section 2.2.1: *Background*. IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b), effective for financial periods commencing on or after 1 January 2005, contains a number of disclosure requirements relating to particular aspects relevant to insurance contracts, but, as was the case with AC 121, does not contain a comprehensive example of the financial statements of a long-term insurer that can be compared to the examples in IAS 1.

Accordingly, to achieve the said objective, the latest available financial statements of the listed South African long-term insurance companies in Table 3-1 were reviewed to identify those significant account balances and classes of transactions contained therein that are specific to listed South African long-term insurers (i.e. accounts that

do not appear in the general purpose financial statements of companies in other industries).

Table 3-1: Listed long-term insurers of which the financial statements were reviewed

Company	Year End
Liberty Group Limited	31 December 2002
New Africa Capital Limited	31 December 2002
Old Mutual Life Assurance Company (South Africa) Limited	31 December 2002
Sanlam Limited	31 December 2002

By using this method, the following items were identified as industry-specific significant accounts and classes of transactions to be considered in the remainder of this part of the research:

- Premiums from long-term insurance policies.
- Commission paid to long-term insurance intermediaries.
- Policy benefits (claims) paid to long-term insurance policyholders.
- Liabilities to policyholders under unmatured policies (“policy liabilities”).
- Operating profit from long-term insurance activities.

A high-level review of the 2003 financial statements of these companies to update the 2002 review confirmed that the results in the previous paragraph remained relevant for the 2003 financial years of the companies. Furthermore, no reason exists to expect them to be significantly different for the 2004 financial years.

The areas identified above are largely similar to those identified in the literature review in Section 4.2: *Aspects relevant to accounting and disclosure by listed South African long-term insurers*, except for the following items (the reasons for exclusion for the purpose of this part of the research are provided):

- **Reinsurance.** The amounts of reinsurance premiums paid and reinsurance claims recovered during the particular financial year covered by the reviewed financial statements were generally not considered to be material in relation to total premiums and claims respectively. This finding was also borne out by the results of the research on overall audit strategies, documented in Chapter 5,

Section 2.9: *Reinsurance*. In the latter section it is concluded that the extent of reinsurance activities in listed South African long-term insurers is not significant.

Assumptions regarding future reinsurance cash flows, however, could have a material impact on the valuation of policy liabilities arising under insurance contracts and the related earnings and reinsurance was therefore included in the part of the research focusing on overall audit strategies, as documented in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

- **Investments and related revenues, as well as income tax.** These items are pervasive to many industries. They were, however, considered in this research to the extent that these items impact on the inherent risk of and overall audit strategy for policy liabilities and the related earnings.

The hypotheses used in this research are developed in the next section.

6. HYPOTHESES

The purpose of this section is to substantiate the development of the hypotheses used in the research, namely that policy liabilities under unmatured policies and the related earnings are industry-specific areas in the financial statements of listed South African long-term insurers potentially exposed to a high level of inherent risk.

It contains an explanation of the rationale for the hypotheses by focusing on each of the eight relevant indicators of inherent risk identified in Section 4.1: *The concept of “inherent risk”*, taking into account the nature of the long-term insurance industry and related accounting and disclosure. Throughout, it is important to be mindful of the interrelationship between policy liabilities and the related earnings.

6.1 Nature of the asset, liability or transaction¹

Policy liabilities are by nature among the largest, if not the largest, line items in the financial statements of a long-term insurer (AICPA, 2003:para. 8.01). They also represent the largest accounting estimate on the balance sheet (AICPA, 2003:para. 5.94A). Consequently, even an insignificant misstatement of policy liabilities measured as a percentage of total policy liabilities, whether intentional or not, has a potentially material impact on fair presentation in the financial statements. Such misstatement often has a very material impact on earnings due to the inter-relationship between these items, as described in Section 6.3: *Complexity of transactions*. This risk is exacerbated by the subjective nature of these items, as discussed in Section 6.4: *Degree of judgement involved*.

6.2 History of errors

This indicator is not generic to all listed long-term insurers, but dependent on the past experience of the auditor with the client. In this research, based solely on this factor, all assertions relating to all industry-specific accounts were therefore assumed to have a high exposure to inherent risk. As a result, history of errors as indicator of potential exposure to inherent risk, will not have a direct impact on the Relative Inherent Risk Index (described in Section 7: *Empirical study and results*).

6.3 Complexity of transactions

As described in Chapter 1, Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*, policy liabilities are calculated by discounting expected future cash flows resulting from policy contracts at a particular discount rate. The expected future cash flows and discount rate are based on the assumptions of the insurer. When these assumptions change, policy liabilities change concomitantly.

¹ This heading was chosen to be consistent with the generic indicators of inherent risk identified in Section 4.1: *The concept of "inherent risk"*. However, in the application of the generic indicator to this research as discussed in this section, assets are not relevant, whereas policy liabilities and the related transactions are relevant.

The actuarial valuation process is inherently a complex mathematical and statistical process that relies heavily on existing source data, complex formulae and actuarial assumptions in respect of future trends in elements such as future mortality, morbidity, interest and inflation rates (Von Wielligh 2001a:9). The accounting systems that are needed to record the information required to properly perform the actuarial valuation process are complex and often require significant manual interventions and adjustments. Depending on factors such as the size of the insurer and the complexity of its product designs, the accounting systems can be either personal computer or mainframe based, and often make use of multiple application programs and input files (AICPA, 2003:para. 8.96).

The complexity of the actuarial valuation process and the related accounting systems therefore increase the inherent risk of a material error being contained in policy liabilities and the related earnings from long-term insurance activities.

6.4 Degree of judgement involved

Marden (1995:2) examined the impact of the overall control environment of the audit client on the auditor's assessment of control risk and inherent risk. As part of this research, he hypothesised that accounts that are more subjective in nature (i.e. those of which the balance is based on management's subjective estimates and therefore capable of being manipulated by management) will be assessed as having a higher inherent risk than more objective accounts (Marden, 1995:25). He found that the subjective accounts had an average mean risk assessment of 57% compared to 37.7% of the objective accounts, supporting the abovementioned hypothesis (Marden, 1995:49). His findings further relate the higher risk assessment for subjective accounts specifically to the valuation assertion, as this assertion becomes more difficult for the auditor to evaluate in more subjective account balances (Marden, 1995:50).

In the following two subsections, these findings are applied to the inherent risk assessment of policy liabilities and the related earnings.

6.4.1 *Policy liabilities*

Practice Note 20: *The audit of insurers in the United Kingdom* (APB, 1999:para. 15) states that the degree of “inherent uncertainty and judgement” involved in the preparation of the financial statements of an insurer exceeds that of most other industries. The reason is that certain claims (policy benefits) can arise over an extended future period of uncertainty.

AICPA (2003:para. 5.94A) states that the assumptions used to calculate policy liabilities is an area that may involve significant judgement by management and subjectivity, increasing the risk of material misstatement of policy liabilities. Pearman (OSFI, 2001:13) supports this notion and adds that few “hard rules” exist for the actuary to enforce in the determination of policy liabilities.

As mentioned in the previous section, the actuarial valuation process to calculate policy liabilities, with its concomitant effect on earnings, relies heavily on the actuary’s assumptions about various factors, including expected future mortality (death), morbidity (disability), inflation rates and investment returns. These factors, in turn, are affected by, *inter alia*, economic conditions and trends (refer to Section 6.8: *Exposure to volatility in economic factors*) and the prevalence of HIV/AIDS (refer to Chapter 1, Section 2.3.7: *Impact of HIV/AIDS*). In addition, in respect of items such as with-profits policies, the actuary needs to assume what policyholders’ reasonable expectations of future bonuses would be, as this has a direct impact on policy liabilities as well as earnings (also refer to Chapter 1, Section 2.3.3: *Complexity of the actuarial valuation process*).

6.4.2 *Earnings from long-term insurance activities*

Earnings from long-term insurance activities are governed by the profit entitlement policies of the insurer. These policies describe the manner in which shareholders earn their profits from the various long-term insurance activities performed by the insurer, and can be linked to specific product lines. They are similar in purpose to accounting policies, although they relate specifically to earnings arising from transactions between shareholder and policyholder funds.

The appropriateness and consistent application of these policies are matters of judgement, which further increases the inherent risk of, in particular, the accurate measurement of earnings from long-term insurance activities.

6.5 Unusual (non-routine) transactions

The *South African Concise Oxford Dictionary* (SACOD, 2002) defines the term “unusual” as “not habitually or commonly done or occurring”. This part of the research assumes this definition as applied from the point of view of a qualified Chartered Accountant (SA) and Registered Accountant and Auditor with no specialised training relating to the long-term insurance industry.

Johnson (1987:124) states that risk factors that influence the processing of routine transactions often differ from those affecting the processing of non-routine transactions and accounting estimates.

The unusual nature of many transactions related to accounting for policy liabilities and the related earnings is best demonstrated in the simplified example contained in Chapter 1, Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*. This example explains accounting for certain transactions related to a simple typical risk product (as opposed to an investment product) and how profits are earned by shareholders as a result of the actual experience of the insurer differing from the previously assumed experience.

These transactions are not recorded in the financial accounting records of the long-term insurer in the way described in the example. Instead, a separate actuarial accounting system is required to accurately record these transactions (also refer to Section 6.3: *Complexity of transactions*), which is not a common occurrence in other types of business. The example demonstrates the unusual nature of many transactions that affect policy liabilities and the related earnings. In addition, in many long-term insurers, the actuarial valuation process is a series of independent, periodic, non-routine projects as opposed to a routine process subject to the controls found in most accounting processes (Arthur, 2005:29).

Furthermore, earnings from long-term insurance activities arise only in part as the difference between income and expenses as recorded in the financial accounting system of the insurer. A potentially significant element thereof, namely the release or strengthening (increase) by the actuary of reserves previously held, is recorded in the income statement by means of non-routine year-end journal entries originated by the actuary (AICPA, 2003:para. 8.96).

For certain product types (e.g. annuities), profits and losses arise if the expected future cash flow profile of the policy liability differs from that of the underlying investment asset(s). These profits or losses are known as mismatching profits and losses (refer to AICPA, 2003:para. 4.06). Once again, the transactions giving rise to these profits and losses are not recorded in the financial accounting records, but by means of non-routine journal entries initiated by the actuary.

The complexity of different product types may also result in different and unusual bases for revenue recognition (APB, 1999:SAS300.5).

The preceding paragraphs provide examples of the myriad of different sources of the earnings of a long-term insurer. To obtain an understanding of the actual sources of the total earnings from long-term insurance activities, the actuary performs a complex analysis of earnings using information not all directly available from the financial accounting systems. Compared to most other types of business, this method is highly unusual.

Although AC 121 (SAICA, 1994) and IFRS 4 (AC 141): *Insurance Contracts* (SAICA, 2004b) provide guidance on presentation and disclosure in the financial statements of long-term insurers, they provide little guidance as to the measurement and recognition of transactions and balances. Various Professional Guidance Notes issued by the Actuarial Society of South Africa provide guidance to the **actuary** on, *inter alia*, the measurement of policy liabilities, but no **accounting** guidance relating to the transactions involved. The lack of authoritative accounting guidance for these transactions in the South African and international contexts is comprehensively discussed in Chapter 1, Section 2.2.1: *Background*.

This situation clearly demonstrates the exposure of transactions relating to policy liabilities and the related earnings to significant disparity in accounting practices, in turn potentially exposing these items to a high level of inherent risk.

6.6 Risk of fraud

Due to the subjective nature of policy liabilities and their concomitant effect on earnings, these items are very susceptible to fraudulent financial reporting with a view to intentionally misleading the users of financial statements.

6.7 Materiality

The process of identifying industry-specific account balances or classes of transactions described in Section 5: *Industry-specific significant account balances and other elements* focused solely on **material** line items. By definition, therefore, all assertions related to each of the identified accounts are exposed to a high level of inherent risk if assessed solely according to the indicator of materiality of the account balance or potential misstatement thereof. As a result, materiality as indicator of potential exposure to inherent risk will not have a direct impact on the Relative Inherent Risk Index (described in Section 7: *Empirical study and results*).

6.8 Exposure to volatility in economic factors

Various products sold by long-term insurers are affected by volatility in the investment markets. The policy liabilities for pure market-linked products, for example, are derived directly from the market value of the underlying investments, which, by its nature, is exposed to any volatility in the market.

Investment market volatility can also have a direct impact on earnings. Products that provide a guaranteed return on investment to the policyholder expose the shareholder to volatility in the investment markets, as any shortfall in assets backing the guaranteed policy liability has to be recovered from shareholder funds, impacting directly on earnings. A recent international example of this phenomenon, namely

that of Equitable Life Assurance Society in the United Kingdom, is discussed in Chapter 1, Section 2.3.6: *Going concern risk*.

The above examples clearly demonstrate why the valuation/measurement assertion - as it relates to both policy liabilities and the related earnings respectively - is potentially exposed to a high level of inherent risk when assessed from the point of view of exposure to variations in economic factors.

6.9 Formulation of hypotheses

Based on the substantiation in the preceding paragraphs, the following hypotheses were adopted in this research:

- (a) Liabilities to policyholders under unmatured policies is an industry-specific account balance that possesses inherent characteristics that should result in the assessment of inherent risk at a high level for most relevant assertions relative to other industry-specific account balances.
- (b) Earnings from long-term insurance activities is an industry-specific account balance that possesses inherent characteristics that should result in the assessment of inherent risk at a high level for most relevant assertions relative to other industry-specific account balances.

7. EMPIRICAL STUDY AND RESULTS

7.1 Overall results

The questionnaire (refer to Section 3: *Research design and method*) required each respondent to assess, in matrix format, as either “high” or “low” the inherent risk for each assertion as it applies to each of the industry-specific account balances or classes of transactions identified in Section 5: *Industry-specific significant account balances and other elements*. The assessment is based solely on each of the eight indicators of inherent risk as identified in Section 4.1: *The concept of “inherent risk”*, read with their further descriptions in Section 6: *Hypotheses*, for a relatively “normal” financial year in the business of the respondent’s long-term insurance audit client.

This process was followed to identify those industry-specific account balances and classes of transactions of listed South African long-term insurance companies that possess inherent characteristics that should lead to the assessment of inherent risk at a high level by their auditors. The rationale was that the account balances and classes of transactions and related assertions that possess most of the inherent risk characteristics represented by the eight indicators of inherent risk are those that would be assessed as potentially being exposed to the highest levels of inherent risk.

Responses were received from eight of the nine potential respondents. Where considered necessary, telephonic follow-up interviews were conducted with respondents to clarify elements of responses. This process resulted in the correction by respondents of a number of minor errors in original responses and a small number of adjustments to original responses. Final, updated responses were used in this research.

For each response in isolation, the relative exposure level (EL) was calculated for each assertion related to each account balance or class of transactions. The number of indicators of inherent risk to which a particular item is potentially exposed was expressed as a percentage of the total of eight indicators, providing an indication, per account and assertion, of the relative potential exposure to numerous risk factors (indicators). Finally, a Relative Inherent Risk Index (RIRI) was calculated for each account balance or class of transactions by calculating the mathematical average of the ELs across all relevant assertions.

The mathematical average of the RIRIs per account balance or class of transactions was then calculated across all responses.

Table 3-2 contains a summary of the results of this process. Appendix J contains the combined results compared with individual responses received. Individual responses are included in the appendix on an anonymous basis to protect the confidentiality of respondents and their clients.

Table 3-2: Relative Inherent Risk Index per account

ACCOUNT	LEVEL OF EXPOSURE TO INHERENT RISK INDICATORS					RIRI
	C	E/O	V/M	R&O	P&D	
Premiums	28%	38%	39%	N/A	36%	35%
Commission	42%	33%	41%	N/A	36%	38%
Policy benefits	33%	52%	58%	N/A	36%	45%
Policy liabilities	77%	52%	80%	67%	59%	67%
Operating profit/ Earnings	53%	48%	58%	N/A	45%	51%

Key:
C = Completeness assertion
E/O = Existence / Occurrence assertion
V/M = Valuation / Measurement assertion
R&O = Rights and Obligations assertion
P&D = Presentation and Disclosure assertions
RIRI = Relative Inherent Risk Index

It is clear from Table 3-2 that the RIRIs for **policy liabilities** and **operating profit (earnings) from long-term insurance activities** are higher than those for any of the other items, across all assertions. These are also the only items for which the RIRIs exceed 50%. All other items have RIRIs of 45% and lower, indicating a relatively low exposure to inherent risk on average across all assertions compared to policy liabilities and earnings. As the business model and types of business sold by each of the insurers included in the survey were different, the exposure levels of each account balance or class of transactions to individual assertions varied from one response to the next, as is evident from a comparison of individual responses in Appendix J. However, responses yielded largely similar overall results, except in the areas specifically discussed in Section 7.2: *Earnings* and Section 7.3: *Policy benefits*.

Throughout this section it should be borne in mind that the RIRI ranks exposure to inherent risk in the industry-specific items included in this research relative to each other only. It provides no indication of their inherent risk levels relative to other non-industry-specific items also included in the financial statements of a long-term insurer. Also, similar to Riley's research (1986:18), it provides no indication of the absolute quantum of inherent risk related to any account balance or assertion.

The RIRIs for policy liabilities were significantly higher than those for premiums, commission and policy benefits for all responses. This indicates that the relative inherent risk relating to policy liabilities is significantly higher than that of the latter

three items. This result supports the hypothesis formulated in Section 6.9: *Formulation of hypotheses*, point (a), namely that “[l]iabilities to policyholders under unmatured policies is an industry-specific account balance that possesses inherent characteristics that should result in the assessment of inherent risk at a high level for most relevant assertions relative to other industry-specific account balances”. It also supports the applicability in the South African context of the notion of the Canadian Institute of Chartered Accountants that the “determination of actuarial liabilities usually will involve high inherent risk” (CICA, 1993:para. 3).

7.2 Earnings

In four of the eight responses (representing 50% of the responses), the RIRI for earnings from long-term insurance activities was lower than one or more of those for premiums, commission and policy benefits. Although in the overall result the RIRI for the former item is higher than those of the latter items, the difference is not as significant as was expected. The reasons for this unexpected result were subsequently discussed with respondents in follow-up interviews.

Earnings from the sale and administration of market-related (investment) business by long-term insurers (as opposed to conventional risk business) are significantly less exposed to the subjective judgements by the actuary in the calculation of the related policy liabilities, which results in lower inherent risk exposures. The reason is that a large proportion of earnings (or profit entitlements) from these products is in the form of fees recovered from policyholder funds, normally simply calculated as a percentage of the market value of the related investments. In contrast, a large proportion of earnings from conventional risk and annuity products is the result of movements in net assets (assets less liabilities), as described in the example in Chapter 1, Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*.

All four insurers represented by the abovementioned four seemingly anomalous responses sell a significant proportion of market-related business. These responses therefore reflect this lower assessment of inherent risk related to earnings from long-term insurance activities. In follow-up interviews, all these respondents indicated

that, had the product mix of the insurer been different (i.e. a greater proportion of conventional risk business), their assessment of inherent risk related to earnings from long-term insurance activities would have been significantly higher (i.e. the RIRI for earnings would have been significantly higher). This lends significant support to the hypothesis formulated in Section 6.9: *Formulation of hypotheses*, point (b), namely that “[e]arnings from long-term insurance activities is an industry-specific account balance that possesses inherent characteristics that should result in the assessment of inherent risk at a high level for most relevant assertions relative to other industry-specific account balances”.

7.3 Policy benefits

It is noteworthy that the overall RIRI of policy benefits is high compared to the RIRIs of premiums and commission. This difference results from three of the eight respondents assessing the valuation assertion specifically as being exposed to a high level of inherent risk on the basis of a number of indicators. Their assessments resulted in a higher average RIRI for this item in the overall result.

Follow-up interviews with these respondents indicated that their responses can again be attributed to insurers who sell a large proportion of market-related products. The value of the policy benefit in these products is not fixed as a monetary amount in the policy contract, but related to (and therefore exposed to the volatility of) the market value of an underlying portfolio of investments on the effective date of the claim.

The high inherent risk assessment in these cases should be related to the valuation of investments (a non-industry-specific item that falls outside the scope of this research) with its concomitant effect on the valuation of policy liabilities, rather than to the valuation of policy benefits. Therefore these three responses anomalously inflated the overall RIRI of policy benefits.

8. CONCLUSION

The research documented in this chapter set out to identify those industry-specific elements in the financial statements of listed South African long-term insurers that are potentially exposed to the highest levels of inherent risk.

A literature study was conducted to provide a sound basis for the application of the concept of inherent risk in the research, particularly with a view to establishing factors that might have an impact on inherent risk at the account/assertion level. Eight factors were identified as indicators of inherent risk, namely:

- nature of the asset, liability or transaction;
- history of errors;
- complexity of transactions;
- degree of judgement involved;
- unusual (non-routine) transactions;
- risk of fraud;
- materiality; and
- exposure to volatility in economic factors.

Financial statements of four listed South African long-term insurers and related accounting and financial reporting guidance were reviewed to identify significant account balances and classes of transactions specific to the long-term insurance industry. These are premiums, commission, policy benefits (claims), policy liabilities and earnings from long-term insurance activities.

An empirical study was subsequently conducted by

- developing the new concept of a Relative Inherent Risk Index, used to rank line-items in order of their level of potential exposure to inherent risk;
- obtaining input from the auditors of eight of the nine listed South African long-term insurance companies as to their assessment of the relative degree of exposure to inherent risk of industry-specific account balances and classes of transactions by means of questionnaires and follow-up interviews; and
- calculating and interpreting the Relative Inherent Risk Index.

The research provided significant support for the hypotheses that **policy liabilities** and **earnings from long-term insurance activities** are potentially exposed to a significantly higher level of inherent risk than any of the other industry-specific elements in the financial statements of listed South African long-term insurers, particularly in the case of an insurer who sells conventional risk products or insurance contracts as defined in Chapter 2, Section 5.2: *Insurance contracts*. The conclusion applies to all assertions relevant to the two elements mentioned. Although the relative inherent risk pertaining to earnings from long-term insurance activities is lower in insurers that sell a greater proportion of market-related products, this item is still considered to be exposed to a higher level of inherent risk than other industry-specific items.

As the existing South African guidance for auditors of long-term insurers contains very limited guidance on the audit of policy liabilities and earnings from long-term insurance activities, there is a dire need for guidance to be expanded in these areas.

The concept of a Relative Inherent Risk Index as developed in this research can be usefully applied by auditors in all industries. The index may be used as a helpful tool in the proper allocation of the audit budget and audit staff among the various elements of the audit.

As policy liabilities (particularly those arising under risk products or insurance contracts) and the related earnings from long-term insurance activities have been proven to be the areas in the financial statements of listed South African long-term insurers potentially exposed to the highest levels of inherent risk, the remainder of the research focuses on these areas.

In most businesses, management designs and implements business and accounting processes and the internal controls contained therein to respond to exposure of the business to inherent risk. In the next chapter, the primary business and accounting processes affecting policy liabilities under insurance contracts and the related earnings are identified.

CHAPTER 4
SELECTED PROCESSES AFFECTING POLICY LIABILITIES AND THE
RELATED EARNINGS

	Page
1. INTRODUCTION	114
2. CONDENSED LITERATURE REVIEW	115
3. EMPIRICAL RESEARCH FINDINGS RELATING TO PROCESSES AFFECTING POLICY LIABILITIES AND THE RELATED EARNINGS	116
3.1 Introduction	116
3.2 Primary processes	119
3.3 Accounting processes	125
4. CONCLUSION	126

LIST OF TABLES

	Page
Table 4-1: Primary processes in a long-term insurer	120
Table 4-2: Order of primary processes in the value chain	121
Table 4-3: Primary process objectives	123
Table 4-4: Primary processes directly affecting policy liabilities and related earnings	123

LIST OF FIGURES

	Page
Figure 4-1: Generic value chain of listed South African long-term insurers, excluding support processes	122

1. INTRODUCTION

The terms “business risk” and “inherent risk” are defined and discussed in Chapter 3, Section 4.1: *The concept of “inherent risk”*. Whereas these risks are exogenous to the audit (and can therefore only be assessed by the auditor), they can be addressed by management by, *inter alia*, designing and implementing effective internal controls. Such controls are embedded in various business and accounting processes that exist within the particular entity. A proper understanding of the business and accounting processes of a client enhances the auditor’s understanding of the business of the client as an important aspect of the audit process.

This chapter comprises mainly an analysis and discussion of the findings of the research relating to the primary business and accounting processes affecting policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities of listed South African long-term insurers.

The internal controls within the business and accounting processes described in this chapter differ among insurers, depending on, *inter alia*, the size and overall internal control structure of the insurer and the types of products sold. They are of potential importance to the auditor in the assessment of the control risk relating to each of the assertions relevant to the abovementioned two components of the financial statements.

As explained in Chapter 2, Section 3: *Overall research design and method*, the inclusion of the discussion of business and accounting processes in the research is incidental to the main objective of the research. It is included in this chapter mainly to allow the research findings to be presented in a comprehensive format.

The chapter commences with a condensed review of relevant literature to define key concepts used in the chapter. This is followed by a discussion of the findings of the research relating to the value chain of a listed South African long-term insurer, a discussion of the typical accounting processes affecting policy liabilities arising under insurance contracts and the related earnings, and a conclusion.

2. CONDENSED LITERATURE REVIEW

The concept of a “value chain” was developed during the 1980s as a tool for analysing the sources of competitive advantage of the entity (Porter, 1985:33). Although twenty years old, it is still relevant in businesses today, as evidenced by its inclusion in more recent authoritative texts on competition (Porter, 1998:77) and cost and management accounting (Thomson & Strickland, 2003:129). In fact, Thomson and Strickland (2003:129) believe that the primary tool for performing strategic cost analysis today is still the value chain. The value chain is also discussed in a variety of contexts in other authoritative texts, including Kaplan and Atkinson (1998:371-372), Drury (1996:25), Ashton, Hopper and Scapens (1991:93 ff.) and Porter (1990:40-44).

The underlying theory of the value chain is that every entity comprises a range of activities to bring its product or service to the market or customer. These activities can be usefully represented in the form of a value chain (Porter, 1985:36). Porter’s value chain comprises a combination of primary and support activities plus a profit margin (Porter, 1985:38).

Primary activities are those activities required to create the product, sell and transfer it to the customer and support it after the sale. In the generic Porter model, these comprise:

- inbound logistics;
- operations;
- outbound logistics;
- marketing and sales; and
- service (Porter, 1985:37).

Support activities support the performance of the primary activities and comprise procurement, technology development, human resource management and various firm-wide functions supporting the entire value chain (Porter, 1985:37). Primary and support activities are linked to each other by the fact that each activity (link) in the chain is the “customer” of the previous activity (link) (Drury, 1996:25).

Kaplan and Atkinson (1998:371) interpret Porter's value chain as comprising business processes that, by inference, each comprises a set of related activities. Therefore, for the purpose of this research, a set of related primary activities is referred to in Section 3: *Empirical research findings relating to processes affecting policy liabilities and the related earnings* as a "primary process", whereas a set of related support activities is referred to as a "support process".

The process of analysing competitive advantage commences with the generic value chain being customised for the particular company concerned (Porter, 1985:45). Porter (1985:36) believes that an attempt to construct a value chain at industry level is too broad, as it obscures the competitive advantages brought by an individual company.

In this research, however, the concept of the value chain is not used to analyse competitive advantage, but merely to obtain an understanding of how the generic primary processes in the value chain are generally interpreted or customised by South African long-term insurers. It is therefore submitted that the attempt in this research to customise the generic value chain for the South African long-term insurance industry as a whole at a high level (refer to Section 3.2: *Primary processes*) is useful for the purpose of this research.

The next section contains a discussion of the empirical research findings relating to the value chain of South African long-term insurers and the business and accounting processes affecting policy liabilities and the related earnings.

3. EMPIRICAL RESEARCH FINDINGS RELATING TO PROCESSES AFFECTING POLICY LIABILITIES AND THE RELATED EARNINGS

3.1 Introduction

The findings from the empirical research done on the processes of a long-term insurer that affect policy liabilities and the related earnings are discussed in this section.

The research design and method for this research are summarised in step 3 of Chapter 2, Section 3: *Overall research design and method* and further elaborated on in other sections of the latter chapter, and are therefore not repeated here. The underlying data for this part of the research was collected by means of a questionnaire sent to the audit executives responsible for the audit of the five largest listed South African long-term insurers for completion. Appendix G contains a copy of the questionnaire.

The questionnaire comprised two distinct parts:

- Part A contained questions designed to collect data relating to the business and accounting processes affecting policy liabilities and the related earnings. Findings from this data are discussed in this chapter.
- Part B (comprising Parts B0 – B9) contained questions designed to collect data relating mainly to overall audit strategies for policy liabilities arising under insurance contracts and the related earnings. Findings from this data are discussed in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

Responses were received from four of the five potential respondents, resulting in an 80% response rate and enabling meaningful interpretation of the data. It should be borne in mind that, as was explained in Chapter 2, Section 4.3: *Data collection*, the fourth respondent omitted answers to some of the questions in the questionnaire for client confidentiality and/or firm risk management reasons. The responses of this respondent were therefore included in the findings only to the extent practicable. Throughout this section and the next chapters, where relevant, indications are provided where data was not available from this respondent. On the basis of the nature of the questions to which responses were omitted by this respondent, the author does not believe that the omissions significantly impair the data provided by this respondent in the context of the main objective of the research.

As was detailed in Chapter 2, Section 4.3: *Data collection*, the absence of a fifth response was compensated for by a review of the research findings by experienced auditors of Deloitte and the provision of their opinions thereon. These opinions were incorporated into the research results. The incorporation of these opinions into the dissertation was documented separately from responses to the questionnaire and is discernable in the dissertation as references to “QR” (Quality Review). As was explained in Chapter 2, Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*, the incorporation of Deloitte into the research resulted in the inclusion of the views of experienced auditors of all of the so-called “Big Four” firms, which meant that a meaningful analysis and interpretation of the data could be done.

Findings are contextualised throughout this section by providing background and explanations from relevant literature reviewed and the experience of the researcher. Where relevant, references to the related question numbers in the questionnaire contained in Appendix G are provided. Responses to all questions in Part A of the questionnaire were incorporated into this chapter. References to the main sources of each question have also been provided in the column of the questionnaire entitled “Source(s)”. The key to the questionnaire, also contained in Appendix G, provides explanations for significant abbreviations used for these references.

As was explained in Chapter 2, Section 4.3: *Data collection*, the abovementioned questionnaire contained different types of questions designed for different purposes (i.e. to elicit different types of responses), including a mix of open and closed-ended questions, and free-form and forced-choice questions. Consequently, the analysis and interpretation of the responses to the different types of questions are also different, in the following way:

- Questions where the level of support by respondents for a particular matter is important are discernable in the dissertation from the use of wording such as “the number of respondents who indicated each [matter] appears in brackets after the [matter]” or from the tabulation of the number of respondents in a table.
- Questions designed to elicit examples or free-form descriptions of matters, where the level of support of respondents for each matter is not regarded as important,

are discernable in the dissertation from the use of words such as “analysis and interpretation of collective responses to Question [x] indicated that...”.

3.2 Primary processes

The concepts of a value chain, business processes, primary processes and support processes are discussed in Section 2: *Condensed literature review*. The generic value chain of listed South African long-term insurers comprises a number of industry-specific primary business processes designed to add value to the customer of the insurer. These primary processes are supported by a number of support processes such as the accounting, human resources and actuarial processes.

It is clear from the discussion about the value chain in Section 2: *Condensed literature review* that the generic value chain designed by Porter (1985) requires customisation to make it applicable to the long-term insurance industry. However, no previous research on the generic value chain of long-term insurers was found during the extensive literature review conducted as part of this research (refer to Chapter 2, Section 3: *Overall research design and method*). The current *Audit Guide on Long-Term Insurance* (SAICA, 1998a:16-17) describes only the accounting processes of long-term insurers (refer to Section 3.3: *Accounting processes*), but not the primary business processes or value chain.

Having knowledge of the business of the audit client is paramount for the auditor. This knowledge extends beyond knowledge of just the accounting functions within the client to its general business operations. It is therefore submitted that, by customising the generic Porter (1985) value chain for long-term insurers on the basis of proper research, this research makes a useful contribution to existing knowledge in this area. The fact that differences of opinion relating to certain aspects of the value chain existed amongst respondents in this research, as is evident from the remainder of this section, further justifies the research.

The focus of this part of the research is on primary processes as opposed to support processes. The particular importance of the actuarial close process as a support process in a long-term insurer should, however, be borne in mind and is discussed

towards the end of this section. Another important support process, the accounting process, is discussed in Section 3.3: *Accounting processes*.

Table 4-1 represents Ernst & Young's (2003:25-27) view of the primary processes in a long-term insurer and the boundaries (i.e. starting point and ending point) of each process, which were used as a starting point in this part of the research. No indications existed at the commencement of this research, however, that this view in any way represents a consensus or majority view within the relevant section of the auditing profession.

Table 4-1: Primary processes in a long-term insurer

Mega process	Starting point	Ending point
Product development	Product concept generation	Product ready for sale
Marketing and distribution	Product ready for sale	Product sold and commission paid to intermediary
New business processing	Product sold	Policy record in-force (active)
Policy administration	Policy record in-force	Termination of policy
Investment management	Cash received	Cash invested (new policies in-force) or disposal of investment (terminations)
Claims handling	Claim reported	Claim settled and policy out of force (terminated)

(Adapted from Ernst & Young, 2003:25-27)

Although the terminology used in Table 4-1 is commonly used in the industry, it is useful to describe the term "in-force" to enhance the understanding of the abovementioned table. A policy becomes in-force when the insurance contract has been entered into between the insurer and the policyholder and the policy has been recorded and activated in the records of the insurer. It then remains in-force until the risks insured under the contract expire (AICPA, 2003:411).

Section 2: *Condensed literature review* explains that the processes in the value chain are linked by the fact that each process is the "customer" of the previous process. In other words, the output(s) of each process in the value chain should be the input(s) into the next process. The complex nature of the long-term insurance

industry complicates this concept. In the marketing and distribution process in Table 4-1, the payment of commission represents an output of the process that does not serve as an input into the new business processing process, as the commission is paid to a “customer” of the process (namely the sales intermediary). In this regard, the marketing and distribution process therefore ends at this point.

Similarly, the links between the outputs of the policy administration and claims handling processes and the inputs to the investment management process are difficult to depict. The latter process (1) invests new cash generated from the policy administration process, when new policies become in-force, and also (2) disposes of investments upon the settlement of a claim in the claims handling process. It is therefore difficult to depict the investment management process amongst the former two processes in the correct order in the value chain. This difficulty is further demonstrated in the varied views of respondents in this regard discussed under Table 4-2.

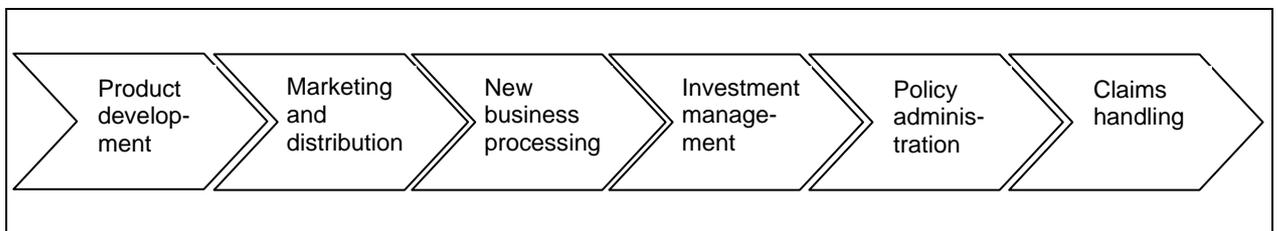
In order to obtain a view of the generic value chain of a South African long-term insurer, respondents were asked to arrange the industry-specific primary processes of a typical South African long-term insurer as described in Table 4-1 in a logical order to form the generic value chain of a South African long-term insurer (Question 1). Responses are analysed in Table 4-2.

Table 4-2: Order of primary processes in the value chain

Mega process	Responses			
	1	2	3	4
Product development	1	1	1	1
Marketing and distribution	2	2	2	2
New business processing	3	3	3	3
Policy administration	4	5	4	5
Investment management	5	4	5	4
Claims handling	6	6	6	6
Key: 1 = First step up to 6 = last step				

It is clear from Table 4-2 that all respondents are in agreement with the order of all primary processes except for policy administration and investment management, where two respondents placed them in reverse order compared to the other two respondents (also refer to the discussion following Table 4-1). QR (Deloitte) supported the view that the investment management process precedes the policy administration process. On the basis of the views of the majority of the respondents (including QR) it can be concluded that the primary processes in the value chain of a listed South African long-term insurer can be depicted as in Figure 4-1 below.

Figure 4-1: Generic value chain of listed South African long-term insurers, excluding support processes



Respondents were asked to indicate the objectives of each of the primary processes depicted in Figure 4-1 (Question 2). All objectives indicated by the majority of respondents (three or more) are included in Table 4-3.

Table 4-3: Primary process objectives

Primary process	Objectives
Product development	Identification of new opportunities
	Product design (including creation of administrative infrastructure)
	Product pricing
	Specification of investment mandates
	New-product quality monitoring
Marketing and distribution	Development of revenue plans
	Selection of optimal distribution channels
	Monitoring of sales results
	Development and management of sales intermediary relationships
New business processing	Underwriting (refer to Chapter 5, Section 4.2: <i>The underwriting process</i> for a description of underwriting)
	Approval and issuance of policy
	Creation of policy record on in-force database (refer to Chapter 5, Section 2.3: <i>Analysis of audit hours</i> for a description of the in-force database)
Policy administration	Maintenance of policy records on in-force database (accurate and complete)
	Recording of premium income
	Collection of premiums
Investment management	Investment of cash in accordance with mandates
	Compliance with investment regulations
	Valuation of investments
	Collection of investment income
	Investment performance reporting
Claims handling	Validation of claims
	Settlement of claims
	Recording of claims
	Updating policy records on in-force database for claims

Respondents were also asked to indicate which of the primary processes in Figure 4-1 have a direct impact on policy liabilities arising under insurance contracts and the related earnings (Question 3). Table 4-4 contains an analysis of responses.

Table 4-4: Primary processes directly affecting policy liabilities and related earnings

Mega process	No. of responses
Product development	1
Marketing and distribution	1
New business processing	4
Policy administration	3
Investment management	3
Claims handling	4

QR indicated that, in their view, all the processes in Table 4-4 have a direct impact on policy liabilities arising under insurance contracts and the related earnings.

On the basis of the majority view it can be concluded that the last four processes in Table 4-4 have a direct impact on policy liabilities arising under insurance contracts and the related earnings, while the primary processes of product development and marketing and distribution do not have a direct impact. However, they may have an indirect impact on these components of the financial statements of listed South African long-term insurers.

As mentioned earlier in this section, the focus of this research is not on support processes. Although a number of support processes (including taxation and accounting (refer to Section 3.3: *Accounting processes*)) have an impact on policy liabilities and the related earnings of listed South African long-term insurers, the actuarial close process is a support process of particular importance that is specific to both the long-term and short-term insurance industries.

This support process encompasses the performance of the entire actuarial valuation process, which is the focal point of much of Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*. As such, the actuarial close process is an important element of the “financial reporting process used to prepare the entity’s financial statements”, as described in ISA 315: *Understanding the entity and its environment and assessing the risks of material misstatement* (IAASB, 2005k:para. 81).

Respondents were therefore asked whether they believe the actuarial close process to be a significant support process in a typical South African long-term insurer (Question 4), and all four respondents responded affirmatively. This view was also supported by QR. It can therefore be concluded that the actuarial close process is definitely a significant support process in a listed South African long-term insurer and should therefore be considered as part of the overall audit strategy.

Whereas this section focused on primary business processes, the next section focuses on accounting processes as significant support processes from the point of view of the auditor of a South African long-term insurer.

3.3 Accounting processes

This section contains an analysis and discussion of the findings of the research relating to the accounting processes of South African long-term insurers.

No data was available from the fourth respondent for the two questions in the questionnaire discussed in this section. However, given the exact similar responses received from the other three respondents to these questions, they represent the majority view. The non-availability of data from the fourth respondent was therefore accepted as having no significant impact on the conclusions in this section. The absence of a fifth response was compensated for by specific input from QR on all findings discussed in this section.

The following list of typical accounting activities and processes of long-term insurers was compiled from a review of the existing *Audit Guide on Long-Term Insurance* (SAICA, 1998a:para. .51-.55), Practice Note 20: *The audit of insurers in the United Kingdom* (APB, 1999:SAS300.10) and the guide entitled *Life and Health Insurance Entities – AICPA Audit and Accounting Guide* (AICPA, 2003:para. 8.94):

- Underwriting or new business
- Renewals or premium collection
- Reinsurance
- Commissions
- Policy records
- Valuation masterfile records and maintenance
- Claims and maturities
- Policy loans and surrenders
- Lapses and reinstatements of policies
- Investments (including unitisation of investment portfolios).

The other international guidance reviewed as part of this research (refer to Chapter 2, Section 5.3: *Literature review*) does not include this type of information.

Respondents were asked whether they believed that each of the accounting processes in the list above exists in a typical South African long-term insurer. In response to Question 5, all three respondents indicated that all of the processes in the list do exist in a typical South African long-term insurer. QR supported this view.

Respondents were also asked to indicate which of the abovementioned accounting activities and processes have a direct impact on policy liabilities arising under insurance contracts and the related earnings (Question 6). Once again, all three respondents indicated that all the abovementioned accounting activities and processes have a direct impact on these components of the financial statements. QR supported this view.

On the basis of these findings it can be concluded that, when obtaining or updating the knowledge of the accounting processes and activities and the related controls of a listed South African long-term insurer in the formulation of the overall audit strategy, the auditor should consider all the abovementioned accounting processes and activities.

4. CONCLUSION

The findings of the research relating to the business and accounting processes of listed South African long-term insurers were discussed in this chapter. These business and accounting processes produce the majority of the information used in the actuarial valuation of policy liabilities arising under insurance contracts and the related earnings.

An important aspect covered in this chapter is the customisation of Porter's (1985) value chain for South African long-term insurers on the basis of input from respondents. The customised value chain makes a contribution to existing knowledge in this area.

Furthermore, the actuarial close process was identified as a support process of importance to the auditor of a South African long-term insurer.

As the information generated by the business and accounting processes discussed in this chapter is often used as audit evidence in the audit of the abovementioned components of the financial statements, the auditor of a listed South African long-term insurer should consider the impact of these processes and activities on the overall audit strategy. The information in this chapter should assist auditors in this process. The next two chapters contain the findings of the research relating to such overall audit strategies.

CHAPTER 5
ANALYSIS AND INTERPRETATION OF RESPONSES TO QUESTIONNAIRE
RELATING TO OVERALL AUDIT STRATEGIES

	Page
1. INTRODUCTION	133
1.1 General	133
1.2 Relationship to the research objective	135
1.3 General profile of respondents	138
2. GENERAL DEMOGRAPHIC ANALYSIS OF RESPONSES	140
2.1 Introduction	140
2.2 Financial reporting and auditing frameworks	140
2.3 Analysis of audit hours	141
2.4 Composition and profile of audit teams	144
2.5 Overall audit strategies	148
2.6 Transaction processing and audit trails	150
2.7 Product profiles	151
2.8 Monitoring of actuarial assumptions	156
2.9 Reinsurance	158
2.10 Conclusion	164
3. FINDINGS RELATING TO KNOWLEDGE OF THE BUSINESS OF THE CLIENT	164
3.1 Introduction	164
3.2 Knowledge of product types	165
3.3 Knowledge of bases of valuation and profit entitlement policies	170
3.4 Knowledge of actuarial guidance and regulatory matters	171
3.4.1 <i>Introduction</i>	171
3.4.2 <i>Actuarial guidance</i>	171
3.4.3 <i>Regulatory requirements</i>	174
3.5 Knowledge relating to actuarial assumptions	176
3.6 Knowledge of non-accounting statistical data	178
3.7 Conclusion	178

4.	FINDINGS RELATING TO BUSINESS AND ACCOUNTING PROCESSES AND THE RELATED INTERNAL CONTROLS OF THE CLIENT	179
4.1	Introduction	179
4.2	The underwriting process	180
4.3	Information technology processes	182
4.4	Reinsurance processes	186
4.5	Processes relating to actuarial assumptions	189
	4.5.1 Introduction	189
	4.5.2 Collection of underlying data	190
	4.5.3 Derivation of assumptions from underlying data	191
4.6	Processes relating to source data used in the actuarial valuation	193
4.7	Conclusion	195
5.	FINDINGS RELATING TO MATERIALITY	196
5.1	Introduction	196
5.2	Research findings	196
5.3	Conclusion	204
6.	FINDINGS RELATING TO THE NATURE OF AUDIT PROCEDURES	204
6.1	Introduction	204
6.2	Valuation methods	206
6.3	Assumptions	207
	6.3.1 Introduction	207
	6.3.2 Underlying data	208
	6.3.3 Derivation of assumptions	211
6.4	Profit entitlements and earnings	217
6.5	Source data	220
	6.5.1 Introduction	220
	6.5.2 Source data contained in the valuation masterfiles	221
	6.5.3 Source data contained in the in-force database	222
	6.5.4 Transfer of data between in-force database and valuation masterfiles	230
	6.5.5 Various other aspects relating to source data	232
6.6	Actuarial calculations	234

6.7	Validation and financial reporting of valuation result	243
6.8	Analytical procedures	249
6.9	Miscellaneous other aspects relating to the nature of audit procedures	252
	6.9.1 <i>Management representations</i>	252
	6.9.2 <i>Deferred acquisition costs</i>	253
	6.9.3 <i>Non-profitable insurance contracts</i>	255
	6.9.4 <i>Reinsurance</i>	256
	6.9.5 <i>Investment return guarantees</i>	258
	6.9.6 <i>Disclosure-related aspects</i>	258
6.10	Conclusion	259
7.	FINDINGS RELATING TO THE TIMING OF AUDIT PROCEDURES	260
	7.1 Introduction	260
	7.2 Research findings	261
	7.3 Conclusion	263
8.	FINDINGS RELATING TO RELIANCE ON THE WORK OF INTERNAL AUDIT	263
	8.1 Introduction	263
	8.2 Research findings	264
	8.3 Conclusion	265
9.	FINDINGS RELATING TO MISCELLANEOUS OTHER MATTERS RELEVANT TO THE AUDIT OF POLICY LIABILITIES ARISING UNDER INSURANCE CONTRACTS AND THE RELATED EARNINGS	266
	9.1 Introduction	266
	9.2 Changes in overall audit strategies since 1998	266
	9.3 Audit of smaller, non-listed South African long-term insurers	267
	9.4 Conclusion	268
10.	OVERALL CONCLUSION	268

LIST OF TABLES

	Page
Table 5-1: Profile of respondents	138
Table 5-2: Analysis of external audit hours	141
Table 5-3: Analysis of average number of team members per role	145
Table 5-4: Analysis of experience and specialised training of audit team members	146
Table 5-5: Extent of insurance contracts	152
Table 5-6: Extent of participating insurance contracts	152
Table 5-7: Comparison of primary valuation methods	153
Table 5-8: Regularity of monitoring of assumptions	157
Table 5-9: Extent of reinsurance premiums paid and reinsurance policy liabilities	159
Table 5-10: Number of companies involved in reinsurance arrangements	161
Table 5-11: Types of reinsurance arrangements	162
Table 5-12: Important characteristics of products	167
Table 5-13: Methods to understand valuation bases and profit entitlement policies	170
Table 5-14: Level of knowledge of Professional Guidance Notes required	172
Table 5-15: Assumptions critical to the valuation of insurance contracts	177
Table 5-16: Significant aspects of new business underwriting process	181
Table 5-17: Significant aspects of underwriting process during claims procedures	182
Table 5-18: Applications for which a high level of audit assurance should be obtained	184
Table 5-19: Outward reinsurance: control-related aspects to be audited	186
Table 5-20: Inward reinsurance: control-related aspects to be audited	187
Table 5-21: Transaction cycles: recording of transactions in in-force database	194
Table 5-22: Significant users of financial statements	197
Table 5-23: Disclosure of materiality and tolerable error amounts to statutory actuary	203
Table 5-24: Insurance contract-related data in in-force database to be traced to source	223
Table 5-25: Insurance contract-related data to be traced from source to in-force database for accuracy	226

Table 5-26: Insurance contract-related data to be traced from source to in-force database for completeness	227
Table 5-27: Significant suspense accounts	233
Table 5-28: Recognised valuation models in use	235
Table 5-29: Types of audit procedures to test allocation of premiums	240
Table 5-30: Types of audit procedures to test allocation of policy benefits	241
Table 5-31: Audit procedures to test creation and cancellation of units	242
Table 5-32: Types of audit procedures for reasonableness and validity of actuarial calculations	244
Table 5-33: Unusual occurrences for which valuation results should be reviewed	245
Table 5-34: Audit focus areas relating to negative bonus stabilisation reserves	246
Table 5-35: Types of audit procedures relating to journal entries	249
Table 5-36: Accounting treatment of acquisition costs	254
Table 5-37: Client correspondence to be reviewed by the auditor	259
Table 5-38: Timing of audit procedures performed prior to year-end	261
Table 5-39: Items to be included in subsequent events review	262

1. INTRODUCTION

1.1 General

This chapter, read in conjunction with Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*, contains an analysis, interpretation and discussion of the data collected during the part of the research relating to overall audit strategies for insurance contracts and the related earnings of listed South African long-term insurers.

The critical role of the statutory actuary in the actuarial valuation, his/her significant impact on policy liabilities arising under insurance contracts and the related earnings and the resulting audit issues are discussed in detail in Chapter 1, Section 2.3: *Audit issues*. Because this particular aspect of the overall audit strategy is so important to the abovementioned components, the findings of the research in this regard are discussed in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* and not in this chapter. Chapter 6 also contains a description of the roles and responsibilities of the statutory actuary. To obtain a holistic understanding of the findings and conclusions relating to a framework for the formulation of overall audit strategies for insurance contracts and the related earnings of listed South African long-term insurers, this chapter should therefore be read in conjunction with Chapter 6.

Findings are contextualised throughout this chapter by providing background and explanations from relevant literature reviewed and the practical experience of the researcher. Chapter 1: *Introduction and background* also contains valuable information that serves to contextualise the findings discussed in this chapter.

As described in more detail in Section 1.2: *Relationship to the research objective*, data used in this part of the research was collected by means of a questionnaire, a copy of which is contained in Appendix G. Where relevant, references to the related

question numbers in the questionnaire are provided¹. References to the main sources of each question have also been provided in the column of the questionnaire entitled “Source(s)”. The key to the questionnaire, also contained in Appendix G, provides explanations for significant abbreviations used for these references.

As explained in Chapter 2, Section 4.3: *Data collection*, the abovementioned questionnaire contained different types of questions designed for different purposes (i.e. to elicit different types of responses), including a mix of open and closed-ended questions, and free-form and forced-choice questions. Consequently, the analysis and interpretation of the responses to the different types of questions are also different, in the following way:

- Questions where the level of support by respondents for a particular matter is important are discernable in the dissertation from the use of wording such as “the number of respondents who indicated each [matter] appears in brackets after the [matter]” or from the tabulation of the number of respondents in a table.
- Questions designed to elicit examples or free-form descriptions of matters, where the level of support of respondents for each matter is not regarded as important, are discernable in the dissertation from the use of words such as “analysis and interpretation of collective responses to Question [x] indicated that ...”.

¹ Responses to all questions contained in the questionnaire have been incorporated into this dissertation, except those (if any) to the following questions, reasons for which are given below:

- Questions 32, 33 and 187: These questions would only have been applicable to respondents under certain circumstances. The circumstances proved not to be applicable to any respondents.
- Question 37: Similar information was obtained from Questions 44 and 210.
- Question 172: Similar information was obtained from Question 174.
- Question 193: Subsequent to the distribution of the final questionnaires for completion, it was decided that the question fell outside the scope of the research as it focused on surrenders as a type of policy benefit as opposed to policy liabilities.
- Question 202: Similar information was obtained from Question 203.

1.2 Relationship to the research objective

This section contains a discussion of the relationship of the contents of this chapter, read with Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*, to the achievement of the objective of the research.

The overall objective of this research as discussed in Chapter 2: *Research objective, design, method and scope* is the development of a best practice framework for the formulation of efficient and effective overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers.

The research design and method for this part of the research are summarised in steps 4 and 5 of Chapter 2, Section 3: *Overall research design and method* and further elaborated on in other sections of the latter chapter, and are therefore not repeated here. As was mentioned in Section 1.1: *General*, the underlying data for this part of the research was collected by means of a questionnaire sent to the experienced auditors responsible for the audits of the five largest listed South African long-term insurers to complete.

Appendix G contains a copy of the questionnaire. The questionnaire comprised two distinct parts:

- Part A contained questions designed to collect data relating to the business and accounting processes affecting policy liabilities and the related earnings. Findings from this data are discussed in Chapter 4: *Selected processes affecting policy liabilities and the related earnings*.
- Part B (comprising Parts B0 – B9) contained questions designed to collect data relating mainly to respondents' views regarding various aspects of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings. Findings from this data are discussed in this chapter and in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

Responses were received from four of the five potential respondents, resulting in an 80% response rate based on the number of insurance audit clients included in the

research and enabling meaningful interpretation of the data. It should be borne in mind that, as explained in Chapter 2, Section 4.3: *Data collection*, the fourth respondent omitted answers to some of the questions in the questionnaire for client confidentiality and/or firm risk management reasons. The responses of this respondent were therefore only included in the findings to the extent practicable. Where relevant throughout Chapters 4, 5 and 6, indications are provided where data was not available from this respondent. On the basis of the nature of the questions to which responses were omitted by this respondent, the author does not believe the omissions to significantly impair the data provided by this respondent and the conclusions based on it in the context of the main objective of the research.

As explained in Chapter 2, Section 4.3: *Data collection*, the absence of a fifth response was compensated for by a review of the research findings by experienced auditors of Deloitte and the provision of their opinions thereon. These opinions were incorporated into the research results where relevant. The incorporation of these opinions into the dissertation was documented separately from responses to the questionnaire and appear in the dissertation as references to “QR” (Quality Review). As was explained in Chapter 2, Section 5.5: *Questionnaire to identify processes and obtain information regarding overall audit strategies*, the incorporation of Deloitte into the research resulted in the inclusion of the views of experienced auditors of all of the so-called “Big Four” firms, enabling meaningful analysis and interpretation of the data.

Chapter 2, Section 4.3: *Data collection* describes how a basic framework for the research questionnaire was developed in this research. This was the first step in achieving the abovementioned research objective of developing a framework for the formulation of overall audit strategies and made a significant contribution towards existing knowledge, as no such framework existed prior to this research. In addition, the overall structure of Chapters 5 and 6 and the structure of the discussions of research findings within the overall structure of these chapters are such that they effectively create a best practice framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings on the basis of the findings of the research. Auditors should accordingly

formulate overall audit strategies for individual audits by following the steps and logic presented in these chapters.

As the discussions in Chapters 5 and 6 contain background information integral to the conclusions drawn, it was not considered appropriate to condense the results and conclusions in the abovementioned two chapters into a summarised version of the above framework, as it is believed that doing so would result in critical context being lost.

As was explained in Chapter 2, Section 2: *Research objective and value*, the auditor's selection of a combination of tests of controls and substantive tests for inclusion in the overall audit strategy depends on various factors, including the risk of material misstatements, the quality of internal controls of the client, the audit methodology of the particular auditing firm and the cost efficiency of the combination of tests of controls and substantive tests. This research therefore did not attempt to formulate a uniform overall audit strategy applicable to all audits of listed South African long-term insurers. Its objective was, however, to develop a **framework** within which such overall audit strategies should be formulated.

As the combination of tests of controls and substantive tests differs among audits of different listed South African long-term insurers, as was discussed in the previous paragraph, no attempt to recommend an appropriate combination of tests of controls and substantive tests was made in the framework developed in this research. The framework provides a comprehensive discussion of all possible types of audit procedures that may be relevant to the audit of a particular area. In formulating the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings of a particular long-term insurance audit client, the auditor should select the combination appropriate to the particular audit from the comprehensive information provided in the framework.

Consequently, where one or more respondents to any question proposed a particular view, this view could not be ignored in the development of the framework merely because it might represent a minority view. It might be appropriate in particular circumstances and was therefore considered in the development of the framework, in

addition to the views expressed by the majority of the respondents. This fact lends additional support to the decision not to further summarise conclusions, as was discussed earlier in this section.

1.3 General profile of respondents

Each of the four questionnaires was completed by a team comprising a number of different experienced auditors of the respective audit teams. Table 5-1 contains an analysis of the profiles of the respondents who completed the four questionnaires, compiled from information provided by respondents.

Table 5-1: Profile of respondents

Role	Number	Avg. yrs of experience	
		This client	Industry
Audit partner	4	19	19
Audit manager	1	5	5
Qualified actuary	3	3	3
<p>Key: Number = Total number of people in each role, counted across all responses This client = Average number of years of experience of all respondents in the particular role on the client mainly referred to in completing the questionnaire, calculated across all responses Industry = Minimum average number of years of experience amongst respondents in the particular role on the audits of long-term insurers</p>			

No data in respect of the columns entitled “This client” and “Industry” was available from the fourth respondent.

The total number of years of experience on the audits of long-term insurers (i.e. data used in the “Industry” column in Table 5-1) was not available for all respondents. In the cases where such data was not available, a conservative approach was taken in analysing the data by equating the number of years of industry experience to the number of years of experience on the audit client selected for the completion of the questionnaire.

It is clear from Table 5-1 that, as a group, the executives responsible for the completion of the questionnaires have extensive experience in the audit of South African long-term insurers in general, and also on the audit of the client selected as

main reference point for the completion of the questionnaire (refer below). This improves the quality of responses and enables meaningful interpretation of and conclusions from the data.

Respondents' average number of years of experience on the audit of the selected audit clients equals their average number of years of experience on the audit of long-term insurers in the industry. It can therefore be concluded that respondents have generally gained their experience of long-term insurance audits on the clients selected for this research.

As a result of the recent introduction of new requirements for the rotation of lead audit partners on the audits of listed clients to improve independence, it is submitted that these statistics might appear significantly different if measured again in future.

The average number of years of experience of qualified actuaries involved in the completion of the questionnaire in Table 5-1 (3 years) appears low compared to those of the audit partners involved (19 years). This is largely the result of the fact that auditors have only been required to include policy liabilities and the related earnings in the scope of their audit opinions since SAAS 620: *Using the work of an expert* (PAAB, 1998) was issued in 1998 (i.e. for the past seven years) (refer to Chapter 1, Section 2.3.3: *Complexity of the actuarial valuation process*). The extent of the incorporation of actuarial expertise into overall audit strategies for South African long-term insurers consequently only became significant over the past seven years (refer to Section 9.2: *Changes in overall audit strategies since 1998*). Opportunities for qualified actuaries to gain audit experience in South Africa have therefore only arisen over the past seven years.

Where relevant, the four respondents mainly referred to the financial years of their selected clients that ended on the following dates during the completion of the questionnaire:

- Metropolitan Life Limited: 31 December 2003
- Old Mutual Plc: 31 December 2004
- Sanlam Limited: 31 December 2003
- Liberty Group Limited: No date available from respondent.

The remainder of this chapter commences with a description of the demography of responses, followed by sections in which the data collected by means of the responses to the questionnaire is analysed, interpreted and discussed in the general order of the typical steps in the audit planning process. This creates a best practice framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers when read in conjunction with Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

2. GENERAL DEMOGRAPHIC ANALYSIS OF RESPONSES

2.1 Introduction

This section contains a description of certain general features of responses and the respective selected long-term insurance audit clients mainly referred to by respondents in completing the questionnaire. This information contextualises the detailed information on overall audit strategies discussed in the remainder of the sections in this chapter and in the next chapter.

2.2 Financial reporting and auditing frameworks

Two of the respondents indicated in response to Question 1 that their clients are required to comply with the financial reporting requirements of countries other than South Africa, namely Namibia and the United States of America. However, these respondents indicated in response to Question 3 that they express their audit opinions solely in accordance with the auditing standards prevailing in South Africa. It can nevertheless reasonably be expected that the overall audit strategies for these insurers may extend beyond those for insurers that are required to comply only with South African financial reporting requirements.

As both these insurers are also directly or indirectly listed in South Africa, they have to comply at a minimum with South African financial reporting requirements, and their overall audit strategies therefore also should allow the expression of an audit opinion

within the framework of South African financial reporting and auditing requirements. Also, the vast majority of the questions in the questionnaire do not require respondents to provide information relating to their specific selected audit client, but instead to express their views of best practice overall audit strategies for listed South African long-term insurers in general, on the basis of their experience. For these reasons, the requirement for two respondents to comply with the financial reporting and auditing requirements of other countries in addition to those of South Africa does not have a significant impact on the quality and comparability of the data collected from these respondents.

2.3 Analysis of audit hours

Table 5-2 contains an analysis of the external audit hours spent on the audit of policy liabilities arising under insurance contracts and the related earnings of the selected audit clients of respondents during a typical financial year (Questions 20 and 21), expressed as a percentage of total external audit hours spent on the relevant clients.

Table 5-2: Analysis of external audit hours

Hours spent by	Average %*	Highest %*	Lowest %*
Auditors	6%	11%	2%
Qualified actuaries employed by the audit firm	2,5%	3%	2%
Qualified consulting actuaries independent of the auditing firm, but engaged by the auditing firm	1,5%	2%	1%
TOTAL	10%		

* Expressed as percentage of total hours spent on the external audit of the client

Some long-term insurers maintain some of the data used in the process of valuation of policy liabilities and the application of shareholders' profit entitlement policies (refer to Chapter 3, Section 6.4.2: *Earnings from long-term insurance activities* for a description of these policies) on the same policy administration systems on which accounting transactions such as premiums and policy benefits are recorded (referred to as the "in-force database"), whereas others maintain this data on separate systems in the actuarial department (referred to as "valuation masterfiles"). In Table 5-2, the audit hours spent on the audit of those parts of the in-force database relevant to policy liabilities arising under insurance contracts and the related earnings

have been included in the hours spent by auditors, qualified actuaries and qualified consulting actuaries on the audit of these components of the financial statements.

ISA 620: *Using the work of an expert* (IAASB, 2005:para. 03) defines an expert as a person “possessing special skill, knowledge and experience in a particular field other than accounting and auditing”. The standard indicates that, if it is deemed necessary during the performance of an audit, the auditor may use the work of an expert to obtain audit evidence in areas where the expertise of another profession is required to supplement that of the auditor, provided that, depending on a number of considerations, specific audit procedures are performed to justify such reliance (IAASB, 2005:para. 04-05).

It is clear from, *inter alia*, Chapter 1: *Introduction and background* and Chapter 3: *High inherent risk elements in financial statements of listed South African long-term insurers* that the statutory actuary of the long-term insurer plays a pivotal role in the valuation of policy liabilities arising under insurance contracts and the determination of the related earnings, which items are included in the financial statements on which the auditor is required to express an opinion. The education and experience of most auditors do not provide them with the expertise of an actuary in order to understand, evaluate and test work performed by the statutory actuary to enable the expression of such audit opinion. As a result most, if not all, auditors of South African long-term insurers use an actuary as an expert to some extent in the audit of the abovementioned areas. Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* contains a detailed discussion of the findings of the research in this regard.

Depending on a number of factors, including the mix of in-force investment and risk products of the insurer and the complexity of its actuarial valuation process, different alternatives exist for the relationship between the auditor and the actuarial expert.

These alternatives (discussed in more detail in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*), one or a combination of which can be utilised by the auditor, include:

- The auditor uses the work of the statutory actuary of the long-term insurance client as appointed in accordance with Section 20 or 21 of the Long-Term Insurance Act No. 52 of 1998 (South Africa, 1998a).
- The auditor uses the work of qualified actuaries **employed** by the auditing firm.
- The auditor uses the work of qualified actuaries independent of the auditing firm who have been **engaged** as consulting actuaries by the long-term insurance client, the auditing firm, or both.

It is clear from Table 5-2 that a significant portion (10%) of total external audit hours on the audit of listed South African long-term insurers is spent on the audit of policy liabilities arising under insurance contracts and the related earnings. Auditors typically focus their audit effort, which can be measured, *inter alia*, in hours, on high-risk areas in the financial statements. The abovementioned finding accordingly lends further support to the findings in Chapter 3: *High inherent risk elements in the financial statements of listed South African long-term insurers*, namely that these components are exposed to a relatively high level of inherent risk.

A significant differential exists between the highest and lowest percentages of external audit hours spent by auditors (as opposed to actuaries) on the audit of policy liabilities arising under insurance contracts and the related earnings in Table 5-2. The total audit effort focused in these areas comprises both internal and external audit work, and the extent of external audit focus on these areas can be expected to be inversely related to the extent of internal audit work. It was therefore hypothesised that the differential is, at least in part, attributable to differences among responses in the extent of internal audit involvement in these areas.

Two of the three respondents were unable to estimate the total internal audit hours spent specifically on the audit of policy liabilities arising under insurance contracts and the related earnings (Question 22). In addition, no data in this regard was available from the fourth respondent. Of the three respondents from whom data was

available, however, two indicated a significant internal audit involvement in these areas without necessarily being able to quantify the number of hours (Question 23). One of the latter responses was also the one that indicated the lowest percentage of external audit hours in these areas (2%). These findings support the hypothesis that the significant difference between the highest and lowest percentages of external audit hours spent on the audit of policy liabilities arising under insurance contracts and the related earnings can, at least in part, be explained by a significant extent of internal audit involvement in the audit of these areas. Section 8: *Findings relating to reliance on the work of internal audit* contains a discussion of various aspects of internal audit involvement in the audit of the latter financial statement components.

Further possible explanations for the abovementioned differential, although not measurable due to their nature, include differences between responses in overall external audit strategies and the business models and structures of the selected audit clients mainly referred to in completing the research questionnaire. No further exploration of these possible explanations was considered necessary in this research as this information was not considered significant in relation to the objective of the research, namely the development of a framework for the formulation of overall audit strategies.

2.4 Composition and profile of audit teams

Audit teams on the audits of listed South African long-term insurers involve team members in a number of different roles. Table 5-3 summarises the responses to Question 217 and contains a list of the different roles mentioned by respondents and the average number of team members in each of the roles. No data was available from the fourth respondent.

Table 5-3: Analysis of average number of team members per role

Role	Average number of team members
Audit partner	2,00
Audit manager	4,67
Information technology specialist	2,33
Actuarial specialist	4,00
Taxation specialist	2,33
Accounting and auditing technical specialist	1,33

The analysis in Table 5-3 focuses on the roles typically played by experienced audit team members. Consequently, it excludes the role of audit team members other than partners, managers and specialists (i.e. less experienced team members). The latter data was regarded as irrelevant for the purpose of this research, as the numbers of these team members can be expected to vary significantly amongst responses in relation to the relative size and complexity of the business operations of the selected audit clients of respondents. This factor was not, however, expected to significantly affect the number of partners, managers and specialists required for the audit of a listed South African long-term insurer.

It was evident from the individual responses to Questions 20 and 21, as summarised in Table 5-2, that one respondent makes use of a firm of consulting actuaries independent of the auditing firm to provide actuarial expertise to the audit team, as opposed to a number of qualified actuaries employed by the auditing firm. As the number of independent consulting actuaries involved in this engagement was unknown, rendering this response incomparable with the others, this response was ignored in calculating the average number of actuarial specialists per audit team as reflected in Table 5-3.

Table 5-3 clearly indicates that all respondents make use of a significant number of experienced audit team members and specialists in the audits of their selected audit clients. This finding meets *a priori* expectations in this regard in the light of the complexity of the audit of a long-term insurer, as was discussed in Chapter 1, Section 2.3: *Audit issues*.

An analysis of individual responses to Question 217 indicated that all respondents make use of at least one team member in each of the roles in Table 5-3. On the

basis of this finding it can be concluded that each of the abovementioned roles should definitely exist within the audit team responsible for the audit of a listed South African long-term insurer.

Questions 218 and 219 yielded data relating to:

- the average number of years of audit experience on long-term insurance clients of team members in different roles; and
- the minimum number of hours per year spent on specialised training for auditors of long-term insurers by team members in each of these roles.

The results are summarised in Table 5-4. No data was available from the fourth respondent.

Table 5-4: Analysis of experience and specialised training of audit team members

Role	Average experience (Years)	Minimum training / year (Hours)
Audit partner	17	9-16
Audit manager	5	9-16
Information technology specialist	7	1-8
Actuarial specialist	7	9-16
Accounting and auditing technical specialist	12	9-16
Long-term insurance industry specialist	17	9-16

In answering the question related to training, respondents were asked to interpret the term “training” in a wide sense to include, *inter alia*, on-the-job training received from senior team members, the reading of relevant literature and interaction with audit client staff (e.g. actuaries).

The role of long-term insurance industry specialist appears in Table 5-4 although it does not appear in Table 5-3. It was, however, evident from all individual responses that this role is played by the audit partner. QR indicated, however, that the role could also be played by a qualified actuary. It can therefore be concluded that this role that focuses on matters relating to the long-term insurance industry is important in the audit team responsible for the audit of a listed South African long-term insurer, and that it could be played by the audit partner or another audit team member such as a qualified actuary.

The role of taxation specialist included in Table 5-3 is not included in Table 5-4, as data regarding specialised long-term insurance industry audit training was not available for this role. The non-availability of this data does not impair any significant conclusions from this research.

It is clear from Table 5-4 that, on average, senior audit executives and specialists on the selected audit clients of respondents have significant experience in the audit of long-term insurers. In individual responses, the lowest number of years of experience in any of the roles in Table 5-4 is four years. These cases were in the roles of audit manager and information technology specialist. The seemingly low average number of years of experience of actuarial specialists should be interpreted by taking into account the fact that significant actuarial involvement in audits of South African long-term insurers appears to only have become a necessity since the introduction of SAAS 620 (PAAB, 1998) in 1998 (refer to Section 9.2: *Changes in overall audit strategies since 1998*).

A comparison of the average number of years of experience of audit partners between Table 5-1 (19 years) and Table 5-4 (17 years) appears anomalous. The difference is the result of the fact that Table 5-4 contains information relating to all audit partners involved in the audit of the client mainly referred to in completing the questionnaire, whereas Table 5-1 contains information relating only to audit partners who were actually involved in completing the research questionnaire.

On the basis of the abovementioned findings it can be concluded that experienced auditors and specialists involved in the audit of listed South African long-term insurers should have significant experience in their respective roles. The conclusion is supported by QR. This finding meets *a priori* expectations in this regard in the light of the complexity of the audit of a long-term insurer, as was discussed in Chapter 1 Section 2.3: *Audit issues*.

It is also evident from Table 5-4 that audit firms make a significant investment in the specialised training of experienced auditors and specialists involved in the audits of their selected audit clients. While Table 5-4 contains the minimum number of hours

per year spent on training amongst the three responses, some individual responses indicated that all staff roles indicated in the table spend more than 24 hours per year on such training. In interpreting the data related to training contained in Table 5-4, it should be borne in mind that, although respondents were instructed to include hours invested in on-the-job training of staff and interaction with audit client staff, these hours are difficult to estimate and may therefore not have been completely included in some responses, resulting in the minimum number of hours possibly being understated.

It can nevertheless be concluded that the abovementioned strategy in respect of training should prevail in all audits of listed South African long-term insurers, particularly in the light of the complexity of the audit of a long-term insurer, as was discussed in Chapter 1, Section 2.3: *Audit issues*. This conclusion is supported by QR. Sufficient investment in the appropriate training of auditors is also suggested in this research as a solution to the prevalent problem of the inexperience of audit staff, as is discussed in Chapter 6, Section 6.2.1: *Lack of experience of audit staff and complexity of actuarial valuation process*.

2.5 Overall audit strategies

Respondents were asked to describe their overall audit strategy for policy liabilities arising under insurance contracts and the related earnings (Questions 4 and 5). No data was available from the fourth respondent. All respondents indicated that a risk-based strategy comprising a combination of substantive tests and tests of controls is followed for their selected audit clients.

All respondents indicated that their audit strategies for the abovementioned components of the financial statements comprise the following major steps described in the Canadian AuG-15: *Audit of actuarial liabilities of life insurance enterprises* (CICA, 1993:para. 15) (Question 5):

- Obtaining an understanding of the role and responsibilities of the statutory actuary.
- Obtaining knowledge of the business.

- Obtaining an understanding of the control environment and relevant control systems.
- Developing a detailed audit strategy.
- Forming a conclusion on the fair presentation of policy liabilities and the related earnings as input into the audit opinion.

An analysis of responses to Question 17 indicated that only the investment management function that has a potentially significant impact on policy liabilities and the related earnings has been outsourced by only one of the selected audit clients to third party administrators. It should be borne in mind that no data was available from the fourth respondent.

On the basis of the abovementioned finding it appears that outsourcing of numerous significant functions by listed South African long-term insurers is not a common occurrence.

The outsourcing of any significant function nevertheless potentially increases the risk of material misstatement in the account balances and classes of transactions affected by the outsourced function, *inter alia*, as the quality of the overall control environment of the service provider as well as its internal controls may differ from those of the insurer. As a result, performance in these areas may not be of the same standard as that of the insurer.

The overall audit strategy for policy liabilities arising under insurance contracts and the related earnings should consequently be tailored to ensure that sufficient appropriate audit evidence is obtained for account balances, classes of transactions and disclosures affected by outsourced functions, in compliance with the requirements of ISA 402: *Audit considerations relating to entities using service organizations* (IAASB, 2005a) and the SAICA Guide entitled *Reports on the Processing of Transactions by Service Organisations: Guidance for Auditors* (SAICA, 2002). As only one respondent (refer previous finding) has experience with outsourced functions, Question 18 focusing on this aspect was answered only by this respondent. The response indicated that, depending on the significance of the risk of the material misstatement of assertions relating to account balances, classes of

transactions and disclosures affected by service providers, one or a combination of the following audit strategies can be employed to ensure that sufficient appropriate audit evidence is obtained for account balances, classes of transactions and disclosures affected by outsourced functions:

- Reliance on a report issued by the external auditor of the service provider on the quality of the control environment of the service provider and/or the effectiveness of its relevant internal controls.
- Substantive confirmations of information for audit purposes by the **service provider** to the auditor (mainly for assertions relating to account balances, classes of transactions and disclosures for which the risk of material misstatement had been assessed as low and for which other sufficient appropriate audit evidence had been obtained).
- Substantive confirmations of information for audit purposes by the **external auditor of the service provider** to the auditor (for assertions relating to account balances, classes of transactions and disclosures for which the risk of material misstatement had been assessed as high).
- Review of the relevant working papers of the client's internal auditors and/or the external auditors of the service provider.

The relevant audit guidance relating to reliance on the work of internal auditors (IAASB, 2005f) and reliance on the work of other auditors (IAASB, 2005m) should be complied with where relevant in this regard.

2.6 Transaction processing and audit trails

As was mentioned in Section 2.3: *Analysis of audit hours*, South African long-term insurers maintain the transactions and other data affecting the calculation of policy liabilities and the determination of the related earnings in one or a combination of different places, including the in-force database and the valuation masterfiles. Some insurers record in the valuation masterfiles a copy of each relevant transaction (e.g. premium receipt or claim) that is recorded in the in-force database and financial accounting records, creating a transaction record or audit trail for each relevant actuarial account balance (also called the actuarial build-up). Others record transactions only in the in-force database and financial accounting records and then

extract only the data required for the valuation from the in-force database to the valuation masterfiles as part of the actuarial valuation process.

In a report following the investigation of Fedsure Life (refer to Chapter 1, Section 2.1: *The South African long-term insurance industry*), recommendations have been made to the Financial Services Board to require that each insurance contract should have its own computerised record that facilitates all “operational functions” that involve the particular record (FSB, 2005:157). These operations include the actuarial valuation and related accounting functions. The record should also record all changes (including maintenance transactions) to the record. Although these recommendations have been made to the Financial Services Board, they have not been issued as requirements and have therefore not necessarily become standard practice in the South African long-term insurance industry.

An analysis of responses to Question 19 indicated that both the abovementioned methods are currently used in listed South African long-term insurers. No data was available from the fourth respondent.

2.7 Product profiles

As was described in Chapter 2, Section 5.2: *Insurance contracts*, the focus of this research is on insurance contracts that, by definition, contain a significant element of insurance risk. Products sold by long-term insurers that do not contain a significant element of insurance risk (investment products) fall outside the scope of this research.

Table 5-5 analyses responses on the basis of the extent of insurance contracts (risk products) in the in-force product mix of each selected audit client (Question 6). No data was available from the fourth respondent.

Table 5-5: Extent of insurance contracts

Insurance contracts as % of total policy liabilities	No. of responses
0% - 25%	0
26% - 50%	1
51% - 75%	1
76% - 100%	1
Total	3

Table 5-5 clearly indicates that insurance contracts comprise a significant portion of the in-force contracts of the selected audit clients of all respondents. These findings support those of Basson (2004a:15) mentioned in Chapter 1, Section 2.1: *The South African long-term insurance industry*. It is therefore imperative that an appropriate overall audit strategy for policy liabilities arising from these contracts and the related earnings exists.

Participating (also known as “with-profits”) insurance contracts are contracts under which policyholders are eligible to share in any surplus generated by the particular block of business (SAICA, 1998a:45). The surplus is allocated to eligible policyholders by means of the periodic declaration of vested and non-vested bonuses that are added to the sum assured under the contracts, in turn increasing the policy liabilities arising under these contracts.

Table 5-6 summarises the extent of the participating insurance contracts of the selected audit clients of respondents. Policy liabilities arising under participating insurance contracts are expressed as a percentage of total policy liabilities (Question 115). No data was available from the fourth respondent.

Table 5-6: Extent of participating insurance contracts

Participating insurance contracts as % of total policy liabilities	No. of responses
0%	0
1% - 5%	0
6% - 10%	0
11% - 25%	0
More than 25%	3
Total	3

Table 5-6 clearly indicates that participating insurance contracts comprise a significant portion of the in-force contracts of the selected audit clients of all

respondents. Respondents' views on overall audit strategies relating to participating insurance contracts included in this research can therefore be regarded as authoritative.

Respondents were also required to provide details regarding the primary valuation method and profit entitlement policies (refer to Chapter 3, Section 6.4.2: *Earnings from long-term insurance activities*) used by their respective selected audit clients for each major type of insurance contract.

Table 5-7 summarises the number of responses for each of the primary valuation methods per major type of insurance contract (Question 7). Two respondents were not prepared to provide this information in response to the questionnaire due to its sensitivity and resulting confidential nature, but it was possible to estimate the necessary data using the latest available annual reports of the particular companies.

Table 5-7: Comparison of primary valuation methods

Contract type	No. of responses		
	N/A	Retro-spective	Prospective
Conventional non-participating	0	0	4
Conventional participating	0	1	3
Non-participating annuities	0	0	4
Participating annuities	0	1	3
Universal life investment-linked classified as insurance contracts	0	1	1*
Investment return guarantees and/or embedded derivatives included in insurance contracts	0	0	4
* The other two companies use a combination of a retrospective and a prospective valuation method for these insurance contracts.			
Key:			
N/A = Insurer has no such in-force contracts			
Retrospective = Retrospective valuation method			
Prospective = Prospective valuation method			

A description of the characteristics of each of the insurance contract types in Table 5-7 falls outside the scope of this dissertation, as this terminology is standard in and pervades the South African long-term insurance industry. The items "Universal life investment-linked classified as insurance contracts" and "Investment return guarantees and/or embedded derivatives included in insurance contracts" and

the terms “retrospective valuation method” and “prospective valuation method” nevertheless warrant brief explanations.

A universal life insurance contract comprises both a risk (insurance) component and an investment component (IASB, 2004b:para. 10). Depending on the substance of the contract and, in particular, the extent of insurance risk transferred to the insurer under the contract, such contracts may be classified as insurance contracts (within the scope of this research) or investment contracts (outside the scope of this research). Respondents were therefore asked to provide information relating only to universal life contracts that are classified as insurance contracts.

Some insurance contracts contain embedded derivatives or guarantees of, for example, minimum investment returns. IFRS 4: *Insurance contracts* (IASB, 2004b) and PGN 110: *Reserving for minimum investment return guarantees* (ASSA, 2003) contain specific guidance on the valuation of these items. Respondents were therefore asked to provide information relating to the specific valuation methods used by their clients for these items.

PGN 104: *Life offices – financial soundness valuation* (ASSA, 2001b) (PGN 104) requires the valuation of policy liabilities in accordance with the Financial Soundness method. In highly simplified terms, this method requires the discounting of a projection of future cash flows from each insurance contract at a realistic discount rate (a prospective valuation method). This complex calculation may include second-tier margins in addition to the minimum level of liabilities required by PGN 104 (Van den Berg, 2004:45). PGN 104 requires disclosure of the existence of any second-tier margins in the financial statements of the insurer. Suggested overall audit strategies relating to second-tier margins are discussed in Section 6.3.3: *Derivation of assumptions*.

Some insurers, however, use a retrospective primary valuation method for some types of insurance contract. In simplified terms, this method entails the liability being equated to the fair value of the underlying investments that have accumulated from the investment of past cash flows relating to each insurance contract. The retrospective value of the liability is compared to the prospective value of the liability,

and the extent to which the retrospective valuation exceeds the prospective valuation is treated as a second-tier margin.

It is clear from Table 5-7 that all respondents have in-force insurance contracts of all the major contract types and that the different insurers in some cases use different primary valuation methods for the same type of contract. The overall audit strategy of the auditor should therefore include an evaluation of the appropriateness and proper application of the valuation method for each contract type. Suggested guidance for this evaluation by the auditor is presented in Section 6.2: *Valuation methods*.

Profit entitlement policies are described in Chapter 3, Section 6.4.2: *Earnings from long-term insurance activities* as being similar to accounting policies for transactions between the shareholders and policyholders of a long-term insurer. In response to Question 8, two respondents indicated that their respective selected audit clients apply the following profit entitlement policies for each of the major types of insurance contract:

Conventional non-participating contracts

- Assets less prospective policy liabilities plus a provision for mismatch between asset and liability profiles (1 respondent).
- Experience profit (1 respondent).

Conventional participating contracts

- Fees earned less expenses (2 respondents).

Non-participating annuity contracts

- Assets less prospective policy liabilities (1 respondent).
- Experience profit (1 respondent).

Participating annuity contracts

- Fees earned less expenses (2 respondents).

Universal life investment-linked contracts classified as insurance contracts

- Fees earned less expenses (2 respondents).

For confidentiality reasons, the other two respondents were not prepared to provide the above information regarding the profit entitlement policies of their selected audit clients. As the only objective of the particular question was to identify whether different listed South African long-terms insurers employ different profit entitlement policies for similar products and the two responses received already clearly demonstrated such diversity, the refusals of the other two respondents were accepted.

The summary of responses clearly demonstrates diversity in profit entitlement policies used by the different insurers for similar product types. As the purpose of this analysis was only to provide an indication of the diversity in profit entitlement policies in use, a detailed description of each of the profit entitlement policies mentioned and an analysis of the differences between them fall outside the scope of this research.

It can be concluded from the above analysis that the overall audit strategy of the auditor should include an evaluation of the appropriateness and proper, consistent application of the profit entitlement policies for each type of insurance contract. QR supported this conclusion. Suggested guidance for this evaluation by the auditor is presented in Section 6.4: *Profit entitlements and earnings*.

2.8 Monitoring of actuarial assumptions

An important step in the actuarial valuation process is the setting of assumptions relating to factors such as future:

- investment returns;
- unit expenses and expense inflation;
- mortality (death);
- morbidity (disability);
- lapses;
- surrenders; and

- taxation.

As was explained in Chapter 3, Section 6: *Hypotheses*, due to the relative magnitude of the account balance of policy liabilities and its direct relationship with earnings from long-term insurance activities, even a relatively small change in assumptions can have a significant impact on the financial statements of a long-term insurer. Similarly, a seemingly small misstatement of assumptions can cause a material misstatement of policy liabilities and the related earnings of a long-term insurer. It is therefore vital for both management and the auditor of a long-term insurer to ensure that assumptions are appropriate and remain that way from one financial year to the next.

In this regard, respondents were asked to indicate how regularly their selected audit clients monitor the appropriateness of actuarial assumptions (Question 9). Responses are summarised in Table 5-8. No data was available from the fourth respondent.

Table 5-8: Regularity of monitoring of assumptions

Interval	No. of responses
More often than once per annum	1
Once per annum	2
Less often than once per annum	0
Total	3

It is clear from Table 5-8 that the selected audit clients of respondents monitor the appropriateness of actuarial assumptions at least once per annum. One respondent indicated in a follow-up interview that, although all assumptions are monitored at a high level on at least an annual basis, formal experience investigations for some assumptions expected to remain relatively stable over time take place less frequently than annually. On the basis of the frequency of the high-level monitoring process, this response was classified in the “once per annum” category.

On the basis of the relative significance of the audit clients included in this research in the South African long-term insurance industry (refer to Chapter 2, Section 5.5: *Questionnaire to identify processes and obtain information regarding*

overall audit strategies), monitoring of assumptions at least on an annual basis can be accepted as an industry best practice.

The actuary can base certain types of actuarial assumptions (e.g. mortality) either on actual historical experience of the insurer (on the basis of experience investigations undertaken by the insurer), or on generally accepted actuarial tables produced by the Actuarial Society of South Africa (on the basis of industry-wide instead of entity-specific experience) (refer to ASSA, 2004:para. 5.4). Alternatively, the generally accepted actuarial tables can be used as a starting point and thereafter customised on the basis of the actual historical experience of the insurer. Respondents were asked to indicate which of these methods was used by their clients (Question 10), and three respondents indicated that the latter method was used. No data was available from the fourth respondent.

It can therefore be concluded that, in setting the relevant assumptions, listed South African long-term insurers use generally accepted actuarial tables customised for their own experience. QR supported this conclusion.

The overall audit strategy of the auditor of a long-term insurer should enable the auditor to obtain sufficient appropriate audit evidence that the assumptions used are appropriate for the business of the insurer. Suggested overall audit strategies to achieve this objective are discussed in Section 6.3: *Assumptions*.

2.9 Reinsurance

Reinsurance is the transfer of insurance risk by the insurer (the reinsured or cedant) to another insurer (the reinsurer or cessionary). Various types of reinsurance exist, including treaty and facultative reinsurance (Diacon & Carter, 2002:222). The South African reinsurance market comprises seven registered dedicated reinsurers (FSB, 2004a:26) as well as a number of registered long-term insurers conducting some reinsurance business. To understand the extent of the reinsurance activities of the selected audit clients of the respondents, Questions 11 to 16 were included in the questionnaire. The results are summarised in Tables 5-9 to 5-11. No data in response to these questions was available from the fourth respondent.

Table 5-9: Extent of reinsurance premiums paid and reinsurance policy liabilities

Interval	No. of responses	
	RI Prems Pd / Tot Prem Inc (%)	RI Pol Liab / Tot Pol Liab (%)
Less than 10%	3	3
10% - 25%	0	0
26% - 50%	0	0
More than 50%	0	0
Total	3	3

Key:
 RI Prems Pd = Reinsurance premiums paid per year
 Tot Prem Inc = Total annual premium income
 RI Pol Liab = Policy liabilities arising from in-force reinsurance contracts written
 Tot Pol Liab = Total policy liabilities

Listed South African long-term insurers can engage in two types of reinsurance activities, namely:

- outward reinsurance (the **transfer** of insurance risk by the “primary” insurer to a reinsurer); and
- inward reinsurance (the **acceptance** of insurance risk by the insurer from another insurer).

Table 5-9 contains a quantification of the extent of the above types of reinsurance activities of the selected long-term insurance clients of the respondents by means of data available to the respondents as the external auditors of the respective insurers. The extent of **inward reinsurance** was measured by expressing the policy liabilities of each insurance client arising from in-force reinsurance contracts as a percentage of the total policy liabilities under all in-force insurance contracts. The extent of **outward reinsurance**, however, was measured by comparing reinsurance premiums paid (to reinsurers) to total premium income of the insurance client of each respondent.

A more accurate measure of outward reinsurance would possibly have been the extent of reinsurance assets (or reduction in policy liabilities resulting from these liabilities being reinsured) expressed as a percentage of total policy liabilities (before any reduction related to reinsurance). However, pilot testing of the questionnaire as

well as the author's previous practical experience in the field indicated that this information is not readily available to the external auditors of listed South African long-term insurers, and in some cases not even to the management of the insurers. Consequently, no attempt was made in this research to obtain such information.

Although IFRS 4 (IASB, 2004b:para. 14(d)(i)) explicitly requires reinsurance assets not to be offset against the related policy liabilities, compliance with this standard is mandatory for South African long-term insurers only for financial years commencing on or after 1 January 2005. However, the financial years mainly referred to by all respondents for completion of the questionnaire ended on or before 31 December 2004. AC 121: *Disclosure in the financial statements of long term insurers* (SAICA, 1994), with which these financial statements were required to comply, contained no such requirement, resulting in some insurers indirectly offsetting reinsurance assets against policy liabilities during the actuarial valuation process, without specifically quantifying such assets.

In this research it was therefore decided to use the ratio of reinsurance premiums paid (to reinsurers) to the total premium income of the insurance client as a proxy for the extent of outward reinsurance. Both the above amounts are required by AC 121 (SAICA, 1994) to be disclosed if they are material and are therefore readily available to external auditors. As premiums paid to reinsurers in effect represent a portion of the premium income from the policy being paid over to the reinsurer as compensation for the reinsurer accepting a portion of the insurance risk related to the policy, the author believes that the abovementioned ratio provides a valid approximation of the extent of outward reinsurance for the purpose of this research. The fact that Adams, Sherris and Hossain (1997:78) used a similar measure of the extent of outward reinsurance in their research lends support to this decision.

The ratio of reinsurance claims "received back" from reinsurers to total policy benefits (claims) paid was also considered as a proxy. This ratio was rejected in favour of the premiums-based ratio as, contrary to (recurring) premium receipts, benefit payments for many types of insurance contracts occur sporadically, rendering the ratio potentially unstable, volatile and less accurate for the purpose of this research. As premium rates are determined on the basis of risk, a premiums-based measure was

also considered to be more closely related to the risk being transferred to the reinsurer than a claims-based measure.

Table 5-9 indicates that an insignificant proportion (less than 10%) of the insurance business of selected audit clients of all respondents comprises reinsurance business. This conclusion warrants a limited extent of focus on overall audit strategies related to reinsurance in this dissertation.

To provide a further indication of the extent of reinsurance activities, Table 5-10 contains an analysis of the parties involved in the reinsurance activities of the selected audit clients of the respondents.

Table 5-10: Number of companies involved in reinsurance arrangements

Number of companies	No. of responses	
	Reinsurers	Reinsured
None	0	3
1	0	0
2	0	0
3	1	0
4	0	0
5 or more	2	0
Total	3	3
Key:		
Reinsurers = Companies to which insurance risk is transferred by the respondent's audit client		
Reinsured = Companies that transfer insurance risk to the respondent's audit client		

The findings in Table 5-10 provide further clarification of the findings in Table 5-9. Table 5-9 indicated that less than 10% of the in-force insurance contracts of the selected audit clients of respondents are reinsurance contracts (inward reinsurance). The findings in Table 5-10 now provide evidence that the actual extent of inward reinsurance is 0%, i.e. none of the selected audit clients acts as reinsurer.

Although Table 5-10 indicates that insurance risk is ceded to a number of reinsurers by the selected audit clients of respondents (outward reinsurance), the extent of this cession is not significant, as is demonstrated by the insignificant extent of outward reinsurance in Table 5-9 (less than 10%).

Table 5-11 contains an analysis of the different types of reinsurance arrangements in which the selected audit clients of the respondents are involved.

Table 5-11: Types of reinsurance arrangements

Type of reinsurance arrangement	No. of responses	
	Transferred	Accepted
No reinsurance arrangements in place	0	2
Treaty	3	0
Facultative	2	0
Unknown to auditor	0	1
<p>Key: Transferred = Arrangements in which insurance risk is transferred by the respondent's audit client to a reinsurer (outward reinsurance) Accepted = Arrangements in which insurance risk is accepted from another insurer by the respondent's audit client (inward reinsurance)</p>		

Although a detailed discussion of the different types of reinsurance falls outside the scope of this dissertation, definitions from Diacon and Carter (2002:222-223) are summarised as follows:

- Treaty reinsurance is characterised by reinsurance agreements where the reinsurer agrees to automatically accept any reinsurances (cessions) within the scope of the agreement.
- Facultative reinsurance agreements offer on an individual insurance contract basis:
 - to the “primary” insurer, the option to offer the risk to the reinsurer; and
 - to the reinsurer, the option to reject the risk.

The fact that the types of reinsurance accepted (if any) by the selected audit client of one of the respondents in Table 5-11 is unknown to the auditor was not considered to have a significant impact on the quality of the response, as the insurance risks accepted by a long-term insurer under an insurance contract for reinsurance are largely similar to those under any other type of insurance contract entered into by a long-term insurer. The policy liabilities under these contracts would therefore be valued in the same way as other similar insurance contracts and would, within the scope of this research, require very limited specific mention in an overall audit strategy for insurance contracts and the related earnings, other than in respect of the

quality of the data received from reinsurers, as is discussed in Section 6.9.4: *Reinsurance*.

It was also concluded from the findings presented in Table 5-10 that none of the selected audit clients of respondents accepts inward reinsurance. On the basis of this conclusion it can reasonably be expected that the abovementioned respondent's audit client has no inward reinsurance arrangements in place (similar to the clients of the other two respondents), resulting in the auditor having no knowledge of such arrangements.

It is evident from Table 5-11 that both treaty and facultative reinsurance arrangements exist in the business of listed South African long-term insurers.

Should the extent of the reinsurance activities of a long-term insurer be significant, resulting in a potentially material impact on the financial statements, the overall audit strategy of the external auditor should enable the auditor to obtain sufficient appropriate audit evidence relating to the account balances, classes of transactions and disclosures affected by it. These include policy liabilities arising under insurance contracts and the related earnings. Some guidance for the overall audit strategy to be followed in this regard is suggested in Section 6.9.4: *Reinsurance*.

On the basis of the findings in this section, however, it can be concluded that the extent of both inward and outward reinsurance activities in the larger listed South African long-term insurers is not significant.

To estimate the extent of reinsurance in smaller listed South African long-term insurers, available relevant information in the 2003 annual financial statements of the smaller listed South African long-term insurers (refer to Table 2-3 in Chapter 2: *Research objective, design, method and scope*), namely Capital Alliance Holdings Limited, African Life Assurance Company Limited, Sage Group Limited (the 30 June 2004 annual financial statements were used for this company) and Clientele Life Limited, was reviewed. Rentsure Holdings Limited was excluded from this review as its listing has since been suspended.

Individual life and employee benefits reinsurance premiums paid was expressed as a percentage of the related premium income of each company. The highest of these ratios, indicative of the extent of outward reinsurance, was 13% for Capital Alliance Holdings Limited. No information that could be used to estimate the extent of inward reinsurance of these smaller listed South African long-term insurers was available from their annual financial statements.

On the basis of this information it can be concluded that the extent of outward reinsurance activities of smaller listed South African long-term insurers is not significant. No conclusion could be drawn relating to the extent of their inward reinsurance activities.

As a result of the relatively insignificant extent of the reinsurance activities of listed South African long-term insurers, this research contains only a limited extent of focus on overall audit strategies relating to reinsurance.

2.10 Conclusion

This section contained a general description of the relevant characteristics of responses to the research questionnaire and the respective selected audit clients of respondents mainly referred to by respondents in completing the questionnaire. This information provides important context for understanding and interpreting the remainder of the sections in this chapter.

The next section contains a discussion of the findings of the research relating to the auditor's knowledge of the business of the client.

3. FINDINGS RELATING TO KNOWLEDGE OF THE BUSINESS OF THE CLIENT

3.1 Introduction

This section contains an analysis, interpretation and discussion of the data collected by means of the responses to questions relating to the auditor's process of obtaining

and/or updating his/her understanding of the business of the long-term insurance client.

3.2 Knowledge of product types

It is clear from the data analysed in Section 2.7: *Product profiles* that listed South African long-term insurers sell a range of product types (types of insurance contract), each with different insurance risk and other characteristics that may impact on the risk of material misstatement in the financial statements and therefore on the overall audit strategy. The analysis in the abovementioned section indicated, for example, that different primary valuation methods and profit entitlement policies are used by different insurers for similar product types.

The overall audit strategy of the external auditor should therefore include obtaining (for the first audit of a particular client and significant new product types of an existing client) and/or updating (for existing audit clients) an understanding of the different product types sold by the client and the characteristics of each significant product type that might affect its recognition, measurement, presentation and disclosure in the financial statements of the insurer.

Various methods can be used by the auditor to obtain an understanding of the products sold by the client. Audit procedures performed on other financial statement elements, including premium income and policy benefits, may provide the auditor with some understanding of products sold. This understanding would, however, rarely be sufficient and respondents' views on the methods to be employed to obtain this understanding were consequently requested.

In response to Question 25, respondents indicated that the following methods are, in their opinion, appropriate (the number of respondents who indicated each method appears in brackets after the method):

- Discussion with client staff (4 and QR). Client job titles mentioned by respondents include staff in the product development division (including product development actuaries) and actuaries responsible for valuation and financial reporting.
- Reading of standard policy contracts and associated literature (4 and QR).

- Reading of product specifications (4 and QR).
- Reading of actuarial renewal bases (documentation used by the actuary to describe the actions to be taken and actuarial transactions to be processed at inception and subsequently on each anniversary date of an insurance contract of each product type) (2).
- Reading of actuarial claims bases (documentation used by the actuary to describe the actions to be taken and actuarial transactions to be processed upon and after the intimation of a claim on an insurance contract of each product type) (2).
- Reading of documents prepared for and considered by the board of directors regarding new products (1 and QR).
- Reading of financial statements of prior year (1).

The list is arranged in order of the level of support by respondents for each method, measured by the number of respondents who indicated each method in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, the first three methods in the abovementioned list are definitely appropriate for the auditor of a listed South African long-term insurer to gain an understanding of the products sold by the client; and
- although only supported by a minority of respondents, the other methods in the abovementioned list may be afforded consideration by the auditor in this regard in specific circumstances. Reasons for less support for these methods include:
 - As a result of different business models and reporting and approval structures amongst insurers, different insurers prepare actuarial renewal and claims bases and new product documentation for the board of directors neither in the same detail, nor at the same level of intelligibility to the auditor.
 - Prior-year financial statements rarely contain information regarding the products of the insurer at a level of detail sufficient for the auditor's required level of understanding.

Participating insurance contracts are described in Section 2.7: *Product profiles*. The completeness, validity and accuracy of data in the in-force database relating to

bonuses are important for actuarial valuation and audit purposes. Respondents indicated that the following methods should be used by the auditor to gain or update an understanding of the client's bonus philosophy and changes in bonus rates (Question 116) (the number of respondents who indicated each method appears in brackets after the method):

- Discussion with the statutory actuary (4 and QR).
- Reading of actuarial documentation (4 and QR).
- Review of minutes of meetings of the board of directors (4 and QR).

It can be concluded that, on the basis of the majority view, all methods in the abovementioned list are definitely appropriate for the auditor of a listed South African long-term insurer to gain an understanding of the client's bonus philosophy and changes in bonus rates.

Question 26, based *inter alia* on the relevant Canadian (CICA, 1993:para. 26) and existing South African guidance (SAICA, 1998a:para. .50), required respondents to indicate the characteristics of each product type of which the auditor should gain an understanding. The findings are summarised in Table 5-12.

Table 5-12: Important characteristics of products

Product characteristic	No. of responses
Underwriting requirements including reinsurance arrangements	4 and QR
Investment return guarantees	4 and QR
Profit entitlement policies	4 and QR
Policy terms	4 and QR
Benefits	4 and QR
Related and/or underlying investments	4 and QR
Commission structure	4 and QR
Premium structure	4 and QR
Regulatory requirements	4 and QR
Expected profitability	4 and QR
Fee income structure	4 and QR
Valuation basis	3 and QR
Target market (characteristics of policyholders)	2 and QR
Volumes sold	2 and QR
Mortality/morbidity/maturity profile	2 and QR
Administration cost structure	2 and QR

Table 5-12 is arranged in order of the level of support by respondents for each characteristic, measured by the number of respondents who indicated each characteristic in his/her response, and includes input from QR. It can be concluded that, on the basis of the majority view, auditors of listed South African long-term insurers should definitely gain an understanding of all characteristics in Table 5-12. The product characteristics that are critical to actuarial valuation data and assumptions are of particular importance (SAICA, 1998a:48 and 50) and are discussed in various later sections in this chapter.

The support for the last four items in Table 5-12 by a smaller majority of respondents should be considered taking into account the following information:

- Although the target market of the product received reduced support in Table 5-12, the importance of certain aspects of the target market was highlighted in responses to Question 34 discussed in the next paragraph. The aspects identified as important in the next paragraph justify the inclusion of the target market as an important characteristic of product types.
- The importance to respondents of proper controls over the collection of data underlying actuarial assumptions in respect of business strategy, including volumes of new business sold, and over the derivation of such assumptions is discussed in Section 4.5.2: *Collection of underlying data* and Section 4.5.3: *Derivation of assumptions from underlying data* respectively. The importance of these controls justifies the inclusion of the volumes sold as an important characteristic of product types.
- In Table 5-15, assumptions regarding mortality, morbidity and expenses received unanimous support from respondents as being assumptions critical to the valuation of insurance contracts. The fact that the derivation of these assumptions takes into account the historical experience of the insurer with regard to these aspects justifies the inclusion of these characteristics in important characteristics of product types.

In response to Question 34, based on the relevant Canadian (CICA, 1993:para. 26) and existing South African guidance (SAICA, 1998a:para. .50), respondents indicated that the following information regarding the characteristics of policyholders

per product type is important for audit purposes (the number of respondents who indicated each characteristic appears in brackets after the characteristic):

1. past lapse and surrender rates (4 and QR);
2. industry (in the case of employee benefits business only) (3 and QR);
3. mortality or morbidity profiles (1 and QR);
4. income bracket (population segment) (1 and QR); and
5. geographic location (1).

The list above is arranged in order of the level of support by respondents for each characteristic, measured by the number of respondents who indicated each characteristic in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, the auditor of a listed South African long-term insurer should definitely gain an understanding of the first two characteristics in the abovementioned list;
- although mortality and morbidity profiles (item 3) was supported only by a minority of respondents, bearing in mind that it received strong support from QR, further borne out by the unanimous support for the significance of mortality and morbidity assumptions in the actuarial valuation process in Table 5-15, the auditor of a listed South African long-term insurer should definitely also gain an understanding of mortality and morbidity profiles; and
- although supported only by a minority of respondents, the fourth and fifth characteristics in the abovementioned list may be afforded consideration by the auditor in this regard in specific circumstances. Less support for these characteristics can be explained by, *inter alia*, differences in the level of homogeneity in policyholder bases amongst insurers. Some listed long-term insurers, for example, sell the vast majority of their products to policyholders in the same income bracket, whereas others sell to policyholders in a variety of income brackets.

Characteristics 2, 4 and 5 can provide indications of the potential of policyholders to afford future premiums, whereas characteristics 1 and 3 can serve as indicators of the respective rates in future. All these characteristics are indicative of the future persistency of the relevant insurance contracts and therefore deemed by

respondents to be relevant to the assessment of the appropriateness of actuarial assumptions by the auditor.

3.3 Knowledge of bases of valuation and profit entitlement policies

Section 2.7: *Product profiles* contains a description of the various primary valuation methods and profit entitlement policies in use by the selected audit clients of respondents. The findings in the abovementioned section suggest that, due to the differences in primary valuation methods and profit entitlement policies for similar products among insurers, the overall audit strategy should include proper consideration of these matters, commencing with a proper understanding thereof.

Respondents were therefore asked to indicate how the auditor should obtain (for the first audit of a particular client and significant new product types of an existing client) and/or update (for existing audit clients) an understanding of the bases of valuation of policy liabilities arising under insurance contracts and profit entitlement policies of the insurer (Questions 35 and 36). Table 5-13 contains an analysis of the responses.

Table 5-13: Methods to understand valuation bases and profit entitlement policies

Method	No. of responses	
	Valuation bases	Profit entitlement policies
Discussion with statutory actuary	4 and QR	4 and QR
Reading of actuarial documentation, including information about new products and the results of actuarial investigations	4 and QR	4 and QR
Review of minutes of meetings of board of directors and, where relevant, its actuarial subcommittee (refer to Chapter 6, Section 5.3.3.2: <i>Objectivity and independence of the statutory actuary</i> for more detail regarding this committee)	3 and QR	3 and QR
Understanding not deemed necessary	0	0

It can be concluded from Table 5-13 that all respondents deem it necessary for the auditor of a listed South African long-term insurer to obtain an understanding of the bases of valuation and profit entitlement policies of the audit client and any significant changes therein. Furthermore, it can be concluded that the majority of respondents and QR deem all the methods contained in Table 5-13 to obtain this understanding, to be appropriate in the formulation of the overall audit strategy for insurance contracts and the related earnings of a listed South African long-term insurer.

3.4 Knowledge of actuarial guidance and regulatory matters

3.4.1 Introduction

Chapter 1, Section 2.2.1: *Background* contains some background on the available financial reporting guidance for listed South African long-term insurers. Significant measurement and disclosure requirements for policy liabilities arising under insurance contracts are also contained in a number of Professional Guidance Notes issued by the Actuarial Society of South Africa (ASSA).

The South African long-term insurance industry is a closely regulated industry. Measurement and disclosure requirements in addition to those in the Professional Guidance Notes are contained in legislation, including the Long-Term Insurance Act No. 52 of 1998 (South Africa, 1998a). The latter act, as well as many other acts and regulations administered by, for example, the Financial Services Board, contains requirements that may impact on the financial statements and, in particular, on policy liabilities arising under insurance contracts and the related earnings.

To comply with, *inter alia*, ISA 250: *Consideration of laws and regulations in an audit of financial statements* (IAASB, 2005e), the overall audit strategy of the auditor of a listed South African long-term insurer should accordingly include obtaining a reasonable level of knowledge and a consideration of actuarial guidance and laws and regulations that may materially affect the financial statements.

3.4.2 Actuarial guidance

Table 5-14 contains an analysis of the views of respondents on the required level of understanding by the audit engagement partner and actuarial expert respectively of a number of important Professional Guidance Notes relevant to policy liabilities arising under insurance contracts and the related earnings, issued by the ASSA (Questions 39 and 40), and includes input from QR. The number of each Professional Guidance Note is followed by a brief description in brackets of the subject matter of the document.

Table 5-14: Level of knowledge of Professional Guidance Notes required

Professional Guidance Note	No. of respondents				No. of respondents			
	Partner				Actuarial expert			
	NR	B	S	E	NR	B	S	E
103 (Actuary's Report)	-	-	4, QR	-	-	-	-	4, QR
104 (Financial Soundness Valuation)	-	-	4, QR	-	-	-	-	4, QR
105 (AIDS Extra Mortality Bases)	-	1	3, QR	-	-	-	-	4, QR
110 (Investment Return Guarantees)	-	1	3, QR	-	-	-	-	4, QR

Key:
NR = No knowledge deemed to be required
B = Basic level (awareness and elementary understanding as a layman)
S = Sufficient level (sufficient to understand and interpret impact on the financial statements)
E = Excellent level (expert knowledge)

The complexity of the audit of a long-term insurer in general and of actuarial guidance in particular creates an *a priori* expectation that the audit engagement partner should possess at least a sufficient level of knowledge of each of the Professional Guidance Notes in Table 5-14, whereas the actuarial expert should possess an excellent level of knowledge.

The findings in Table 5-14 support these expectations, except for the fact that one respondent indicated that the audit engagement partner requires only a basic level of knowledge of Professional Guidance Notes 105 and 110. This unexpected result could be attributable to the fact that, of the Professional Guidance Notes mentioned in Table 5-14, these two are the most actuarially specialised. Consequently, the respondent holds the view that strong reliance should be placed on the actuarial expert in this regard for audit purposes. QR agreed with this conclusion. This overall audit strategy does not contravene existing auditing guidance, although it should be borne in mind that such reliance increases the risk of error resulting from reliance on an actuarial expert, which should be addressed as suggested in Chapter 6, Section 5.3: *Reliance on the work of an actuary*.

If the view expressed by one respondent as discussed in the previous paragraph is accepted as a minority view, it can be concluded from Table 5-14 that the audit engagement partner responsible for the audit of a listed South African long-term insurer should possess a level of knowledge of the Professional Guidance Notes mentioned in the table that is at least sufficient to understand and interpret their

impact on the financial statements, whereas the actuarial expert should possess an excellent level of knowledge of this guidance.

All respondents also indicated that audit team members in the role of audit manager should also have at least a “sufficient” (as defined in Table 5-14) level of knowledge of the relevant Professional Guidance Notes issued by the ASSA (Question 41).

No respondents indicated that audit team members in any roles other than those of audit engagement partner, actuarial expert and audit manager require at least a “sufficient” (as defined in Table 5-14) level of knowledge of the relevant Professional Guidance Notes. This finding should, however, not be interpreted as indicative of the fact that other audit team members require no knowledge of this guidance. As the guidance is complex and actuarially specialised, it is suggested that other audit team members should have at least a “basic” (as defined in Table 5-14) level of knowledge of this guidance. This suggestion was supported by QR.

Although the subject matter of PGN 103: *The report by the statutory actuary in the annual financial statements of South African long-term insurers* (ASSA, 2002) (PGN 103) as included in Table 5-14, namely the content of the report by the statutory actuary, may at first glance possibly appear to be of lesser importance to the auditor, this is not the case. Its requirements include an analysis of the change in the excess of assets over liabilities over the period showing the financial effect of changes in valuation methods or assumptions separately (ASSA, 2002:para. 4.5). Whether a change in valuation method or assumptions should be treated as a change in accounting policy and adjusted retrospectively in the financial statements or, alternatively, as a change in accounting estimate and accounted for in the current period in accordance with IAS 8 (AC 103): *Accounting policies, changes in accounting estimates and errors* (SAICA, 2004c), is often a complex issue and a source of debate amongst accountants, auditors and actuaries of long-term insurers (supported by Albert, 2005). As a result, the audit partner should have at least a sufficient level of knowledge of the requirements of PGN 103 to form a proper opinion on these matters.

Responses to Question 38 indicated that the auditor should use the following methods to gain knowledge of the relevant Professional Guidance Notes issued by the ASSA (the number of respondents who indicated each method appears in brackets after the method):

- Reading the Professional Guidance Notes and related literature (4 and QR).
- Discussion with the statutory actuary (4 and QR).
- Discussion with the actuarial expert on the audit team (4 and QR).
- Attendance of training courses (3 and QR).

The list above is arranged in order of the level of support by respondents for each method, measured by the number of respondents who indicated each method in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that all the abovementioned methods are definitely appropriate for the auditor of a listed South African long-term insurer to obtain knowledge of the relevant Professional Guidance Notes issued by the ASSA.

3.4.3 Regulatory requirements

Respondents indicated that the audit team members in the following roles should have at least a “sufficient” (as defined in Table 5-14) level of knowledge of the regulatory requirements relevant to the business and audit of a listed South African long-term insurer (Question 43) (the number of respondents who indicated each role appears in brackets after the role):

- Audit engagement partner (4 and QR)
- Audit manager (4 and QR)
- Actuarial expert (4 and QR)
- Supervisor (3 and QR)
- Audit staff below supervisor level (1)
- Information technology audit partner (1)
- Information technology audit manager (1).

The list above is arranged in order of the level of support by respondents for each role, measured by the number of respondents who indicated each role in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, in the audit of a listed South African long-term insurer, audit team members in the first four roles in the abovementioned list should definitely have at least a “sufficient” (as defined in Table 5-14) level of knowledge of the relevant regulatory requirements; and
- although only supported by a minority of respondents, a “sufficient” (as defined in Table 5-14) level of knowledge may be required of audit team members in the last three roles in the abovementioned list in this regard in specific circumstances.

Reasons for less support for these roles include:

- Certain, but not all, staff members below supervisor level may require this knowledge insofar as it is relevant to the particular part of the audit in which they are involved (supported by QR).
- Overall audit strategies for different insurers differ with regard to the level of dependence on the information technology and related controls of the audit client. The level of knowledge of regulatory matters required by information technology auditors therefore depends on the level of audit assurance required from this area.

Furthermore, responses to Question 42 indicated that the auditor should use the following methods to gain knowledge of the relevant regulatory requirements (the number of respondents who indicated each method appears in brackets after the method):

- Reading the regulatory requirements and related literature (4 and QR).
- Attendance of training courses (4 and QR).
- Discussion with the audit client (in particular, client staff in the roles of compliance officer and statutory actuary, the audit committee and staff in the finance department) (3 and QR).

The list above is arranged in order of the level of support by respondents for each method, measured by the number of respondents who indicated each method in his/her response, and includes input from QR. On the basis of the majority view it

can be concluded that all methods in the abovementioned list should definitely be used by the auditor of a listed South African long-term insurer to gain knowledge of the relevant regulatory requirements.

On the basis of the findings above it can also be concluded that the regulatory requirements relevant to the business and audit of a listed South African long-term insurer should be sufficiently understood by a wider range of audit team members than the relevant actuarial guidance discussed in Section 3.4.2: *Actuarial guidance*.

3.5 Knowledge relating to actuarial assumptions

The complexity of the valuation of policy liabilities arising under insurance contracts is explained in Chapter 1, Section 2.3.3: *Complexity of the actuarial valuation process*. One of the reasons for this complexity is the significant degree of management judgement involved in making assumptions about future trends in certain elements affecting the valuation. The findings in Section 2.8: *Monitoring of actuarial assumptions* indicated that the overall audit strategy of the auditor should include an assessment of the appropriateness of assumptions for the business of the insurer.

ISA 545: *Auditing fair value measurements and disclosures* (IAASB, 2005d:para. 44) requires the auditor to focus on **significant** assumptions. Management can identify particularly sensitive assumptions by means of techniques such as sensitivity analyses (IAASB, 2005d:para. 45). Table 5-15 contains an analysis of respondents' views on which types of actuarial assumptions are critical to the valuation of policy liabilities arising under insurance contracts (i.e. significant) (Question 44).

Table 5-15: Assumptions critical to the valuation of insurance contracts

Assumption type	No. of responses
Mortality (death)	4 and QR
Morbidity (disability)	4 and QR
Investment returns	4 and QR
Underlying mix of investments	4 and QR
Interest rates	4 and QR
Expenses	4 and QR
Taxation	4 and QR
Lapse and surrender/withdrawal rates	4 and QR
Future bonus rates	4 and QR
Consumer price index or equivalent for premium indexation (premium growth)	1 and QR

Table 5-15 is arranged in order of the level of support by respondents for each type of assumption, measured by the number of respondents who indicated each type of assumption in his/her response, and includes input from QR. Respondents had the option to add additional assumptions to those originally included in the questionnaire and no respondents added any additional assumptions to those contained in Table 5-15. It can therefore be concluded that Table 5-15 contains a comprehensive list of the actuarial assumptions critical to the valuation of policy liabilities arising under insurance contracts and the related earnings of a listed South African long-term insurer.

On the basis of the majority view it can also be concluded that all assumptions in Table 5-15, except the last one, are definitely critical to the valuation of the abovementioned components of the financial statements of listed South African long-term insurers. Assumptions regarding inflation are also applied to expenses as a significant element of future cash flows incorporated into the valuation of policy liabilities. In this light it is submitted that, notwithstanding the minority view of respondents, assumptions regarding inflation should also be regarded as critical to the actuarial valuation. The latter conclusion was also supported by QR.

Most of the assumptions identified in Table 5-15 are directly or indirectly affected by business conditions and trends (CICA, 1993:para. 27) and knowledge of the latter is therefore important in the evaluation of the appropriateness of assumptions. Suggestions relating to overall audit strategies in this regard are discussed in Section 6.3: *Assumptions*.

3.6 Knowledge of non-accounting statistical data

The valuation of policy liabilities arising under insurance contracts and the proper application of profit entitlement policies is dependent not only on financial (accounting) data (e.g. premiums received) recorded in the financial accounting systems of the insurer, but also on non-accounting statistical data (e.g. age of the policyholder and number of lapses) recorded in other systems of the insurer (APB, 1999:SAS420.8 and SAS300.17) (also refer to Chapter 3, Section 6.5: *Unusual (non-routine) transactions*).

In response to Question 45, respondents identified the following non-accounting statistical data to be important to the valuation of policy liabilities under insurance contracts (the number of respondents who indicated each item appears in brackets after the item and includes input from QR):

- Personal statistics of the policyholder (e.g. birth date, gender, smoking status and population group) (4 and QR).
- Insurance contract-related data (e.g. in-force status, sum assured, rider benefits and second lives assured) (4 and QR).

On the basis of this information it can be concluded that the abovementioned two types of non-accounting statistical data are definitely important to the valuation of policy liabilities arising under insurance contracts and the related earnings of a listed South African long-term insurer. The overall audit strategy of the auditor should therefore include the appropriate nature, timing and extent of audit procedures to obtain sufficient appropriate audit evidence regarding these types of data. Suggestions relating to overall audit strategies in this regard are discussed in Section 6.3: *Assumptions* and in Section 6.5: *Source data*.

3.7 Conclusion

This section contained a discussion of the findings of the research in respect of the areas of the business of the client and related matters that should be considered by

the auditor when gaining and/or updating his/her knowledge of the business of the long-term insurance client.

The next section contains a discussion of the findings of the research relating to various aspects of the overall audit strategy in respect of the business and accounting processes and related internal controls of the long-term insurance audit client.

4. FINDINGS RELATING TO BUSINESS AND ACCOUNTING PROCESSES AND THE RELATED INTERNAL CONTROLS OF THE CLIENT

4.1 Introduction

Chapter 4: *Selected processes affecting policy liabilities and the related earnings* contains a description of the business and accounting processes affecting policy liabilities arising under insurance contracts and the related earnings. Because of the large volumes of transactions of a long-term insurer affecting these components of the financial statements, the overall audit strategy often comprises a combination of reliance on internal controls and substantive procedures (SAICA, 1998a:para. .47).

After obtaining and/or updating the auditor's knowledge of the client's business, the next step in the audit planning process typically involves gaining and/or updating the auditor's knowledge of the client's significant business and accounting processes and related internal controls. The design and implementation of internal controls to prevent or detect and correct material misstatements in the financial statements are assessed during this stage of audit planning to support decisions as to which, if any, internal controls are to be tested by means of tests of controls. No tests of controls are, however, performed at this stage of the audit (IAASB, 2005k:para. 54-56).

This section contains an analysis, interpretation and discussion of the data in respect of business and accounting processes and the related internal controls relevant to the audit of policy liabilities arising under insurance contracts and the related earnings, collected by means of responses to the questionnaire.

It is important to recognise that the nature and quality of accounting processes and internal controls differ amongst insurers. As a result, not all processes and controls referred to in this section will necessarily exist within the selected audit clients of all respondents. Where these do not exist or the auditor assesses their design and implementation to be ineffective, the extent of substantive testing should be increased to sufficiently address the related risks of material misstatement.

4.2 The underwriting process

Underwriting is defined as “[t]he process of examining, accepting, or rejecting insurance risks, and classifying those selected, in order to charge the proper premium for each” (SAICA, 1998a:45). The purpose of underwriting of new business is to ensure that insurance risk is spread in such a manner that it is fair and equitable for policyholders and profitable for the insurer.

An underwriting process that is not properly designed and implemented may have a direct impact on policy liabilities and the related earnings in a number of respects, including the understatement of policy liabilities in the case of unprofitable or onerous insurance contracts. The underwriting process should therefore be regarded as a significant process in the audit of a long-term insurer (refer to APB, 1999:SAS420.4).

Table 5-16 analyses responses in respect of the aspects of the new business underwriting process that should be reviewed by the auditor of a listed South African long-term insurer (Question 46), and includes input from QR.

Table 5-16: Significant aspects of new business underwriting process

Aspect	No. of responses		
	Yes	No	Total
Setting reinsurance requirements for the product	4, QR	0	4, QR
Setting underwriting policy for the product	2, QR	2	4, QR
Setting underwriting medical limits for the product	2, QR	2	4, QR
Underwriting each case	2, QR	2	4, QR
Setting of exclusions (aspects not covered by the insurance contract)	2, QR	2	4, QR
Requisition of medical information	2	2, QR	4, QR
Key: Yes = Number of respondents indicating that aspect should be reviewed by the auditor No = Number of respondents indicating that aspect should not be reviewed by the auditor			

It can be concluded that:

- on the basis of the majority view, all aspects of the new business underwriting process in Table 5-16 except the last one should definitely be reviewed by the auditor of a listed South African long-term insurer; and
- the last aspect in Table 5-16 should be afforded significant consideration in this regard on the basis of its support by 40% (two out of a possible five, the latter including QR) of the respondents.

It is clear from Table 5-16 that differences of opinion existed among respondents regarding the aspects of the new business underwriting process that should be reviewed by the auditor. It is submitted that these differences are the result of, *inter alia*, the following:

- Different overall audit strategies in this regard followed by respondents on the audit clients with which they have experience.
- Differences in certain nuances of the interpretations of respondents of the term “reviewed by the auditor” as used in the question. A review of the underwriting process does not imply that the auditor should obtain a detailed understanding of, or perform tests of controls over, the process. It is submitted that a level of understanding sufficient to enable the auditor to conclude that the underwriting process exists and is monitored by management should be sufficient at this stage of the audit process. QR emphasised the fact that the auditor’s review should focus on aspects of the underwriting process that may materially impact on expected future claims experience.

Aspects of the underwriting process also play an important role when a claim is intimated on an insurance contract. Before a claim is approved for payment, the insurer should ensure that the relevant underwriting requirements of the contract as set when the contract was approved and entered into have been adhered to. A typical example of one of these aspects, namely exclusions, is that a suicide-related claim should not be approved if suicide was an exclusion from the contract set during new business underwriting.

Table 5-17 analyses responses in respect of the aspects of the claims underwriting process that should be reviewed by the auditor of a listed South African long-term insurer (Question 47) and includes input from QR.

Table 5-17: Significant aspects of underwriting process during claims procedures

Aspect	No. of responses		
	Yes	No	Total
Review of underwriting requirements, exclusions, incomplete information etc. upon intimation of a claim	2, QR	2	4, QR
<p>Key: Yes = Number of respondents indicating that aspect should be reviewed by the auditor No = Number of respondents indicating that aspect should not be reviewed by the auditor</p>			

On the basis of the majority view in Table 5-17, it can be concluded that the auditor of a listed South African long-term insurer should definitely review the aspects of the claims underwriting process in the abovementioned table.

As was the case in Table 5-16, differences of opinion existed among respondents regarding the aspects (if any) of the claims underwriting process that should be reviewed by the auditor. Similar considerations to those discussed with regard to the abovementioned table apply in the case of Table 5-17.

4.3 Information technology processes

Long-term insurers depend heavily on advanced information systems for the capturing, processing, storage and reporting of both financial and non-financial information (refer to Section 3.6: *Knowledge of non-accounting statistical data*). The overall audit strategy for policy liabilities arising under insurance contracts and the

related earnings should therefore include an evaluation of the internal controls within the relevant information system environments. The quality of electronic data for use in computer-assisted audit techniques (refer to AICPA, 2003:xi) is also enhanced by the existence and proper operation of information system controls. The American guide entitled *Life and Health Insurance Entities – AICPA Audit and Accounting Guide* (AICPA, 2003:para. 5.31) suggests that “control issues involving IT should receive considerable attention” during the audit of a long-term insurer.

Respondents indicated that the following functions affecting policy liabilities under insurance contracts and the related earnings of their selected audit clients are highly computerised (Question 48) (the number of respondents who indicated each function appears in brackets after the function; no data was available from the fourth respondent):

- Accounting, management and regulatory reporting information (3).
- Recording and processing of insurance transactions (policy administration systems) (refer to the discussion of the different ways in which insurers maintain valuation data in Section 2.3: *Analysis of audit hours*) (3).
- Actuarial valuation data (refer to the discussion of the different ways in which insurers maintain valuation data in Section 2.3: *Analysis of audit hours*) (3).
- Actuarial valuation calculations (3).
- Unitisation of investment portfolios containing the investments underlying policy liabilities arising under insurance contracts (2).

Because of the large volumes of transactions of a long-term insurer and the availability of data in electronic format, the use of computer-assisted audit techniques can often add to the efficiency and effectiveness of the overall audit strategy. A high level of computer auditing expertise is, however, often required to properly utilise such techniques and also to evaluate the information systems environment.

All respondents indicated that the highest level of computer auditing expertise required in an audit team of a listed South African long-term insurer should be the partner level (Question 49). QR supported these views. This finding corresponds to the findings from individual responses to Question 217 analysed in Table 5-3, namely

that all respondents indicated that at least one information technology audit partner is included in their audit teams for their selected audit clients.

On the basis of the above it can be concluded that the audit team for a listed South African long-term insurer should definitely include at least one information technology audit partner.

Weak or ineffective general controls in an information systems environment can result in weak or ineffective application controls respectively (Romney & Steinbart, 2000:308). Respondents were accordingly asked what level of audit assurance they believe should be obtained from audit procedures on the reliability of **general controls** within the information technology environment affecting policy liabilities arising under insurance contracts and the related earnings (Question 50). On a scale of “None” (i.e. a purely substantive audit approach should be followed), “Low” and “High”, all respondents indicated that a high level of assurance is required.

Table 5-18 contains an analysis of respondents’ views of the information technology applications relevant to policy liabilities arising under insurance contracts and the related earnings for which a high level of audit assurance should be obtained in respect of **controls over the applications** (Question 51).

Table 5-18: Applications for which a high level of audit assurance should be obtained

Application	No. of responses
Recording of accounting transactions in the in-force database	4 and QR
Recording of in-force database maintenance transactions	4 and QR
Investment masterfiles	4 and QR
Claims masterfiles	4 and QR
Valuation masterfiles	3 and QR

Table 5-18 is arranged in order of the level of support by respondents for each application, measured by the number of respondents who indicated each application in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings of a listed South African long-term insurer should definitely include sufficient and appropriate tests of controls to provide

the auditor with a high level of assurance with regard to all the information technology applications in Table 5-18.

The interaction between the in-force database and valuation masterfiles is discussed in Section 2.3: *Analysis of audit hours*. In deciding on an overall audit strategy in this regard, it should be borne in mind that some accounting transaction cycles may be completely integrated with the in-force database, whereas others may be stand-alone systems of which the transactions require a separate update to the in-force database (AICPA, 2003:para. 6.07). Furthermore, as previously discussed, the in-force database also possibly contains non-accounting data (e.g. gender of the policyholder) and transactions (e.g. cession of a policy) that have to be maintained.

The specifications of newly developed insurance products may differ significantly from those of existing products. As part of the product development process mentioned in Chapter 4: *Selected processes affecting policy liabilities and the related earnings*, information technology requirements relating to any new product should be considered by the insurer and changes to existing systems and the development of new systems may be required.

From an auditing point of view, however, given the nature of the long-term insurance business, new products sold often do not result in a risk of material misstatement of policy liabilities or the related earnings during the first few years as a result of, for example, insignificant volumes sold. It could therefore have been expected that respondents might indicate that the auditor should not be required to review the capability of information technology applications to properly handle the specifications of new products.

Two of the four respondents, however, indicated that such a review should be required as part of the overall audit strategy (Question 52). The author supports this view because if information system controls related to these products had not been effective for the first number of years of its sales, resulting in immaterial misstatements of the valuation data and the financial statements, these misstatements would be required to be corrected once the product does become

significant or “material” to the financial statements. Such corrections of data could be costly for the client and the audit thereof very inefficient.

4.4 Reinsurance processes

The concept, types and various other aspects of reinsurance are discussed in Section 2.9: *Reinsurance*. It was evident from the findings in the latter section that the reinsurance activities of listed South African long-term insurers are not significant. This justified a limited focus on reinsurance in the remainder of this research.

Table 5-19 analyses respondents’ indications of the internal control-related aspects of **outward** reinsurance (i.e. insurance risks transferred to other insurers) that should be assessed and, if possible, tested by the auditor, should reinsurance be material (Question 53).

Table 5-19: Outward reinsurance: control-related aspects to be audited

Control-related aspect	No. of responses
Controls over completeness and accuracy of listings of reinsurance contracts	4 and QR
Initial assessments and ongoing monitoring of financial stability of reinsurers	4 and QR
Controls to ensure accurate and complete reflection of contract terms and conditions in the actuarial valuation	4 and QR
Reconciliation of reinsurance contracts to policy and contract records	4 and QR
Controls over legality of new reinsurance contracts and contract cancellations	2 and QR
Procedures for resolution of claims disputes	1

Table 5-19 is arranged in order of the level of support by respondents for each aspect, measured by the number of respondents who indicated each aspect in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, the first five control-related aspects relating to outward reinsurance in Table 5-19 should definitely be assessed and, if possible, tested by the auditor of a listed South African long-term insurer should outward reinsurance be material (controls over the legality of new contracts and contract cancellations were supported by a smaller majority of respondents than the first four items, *inter alia* as, depending on the number of reinsurance contracts in place, this aspect, unlike the other four, can potentially be efficiently and effectively verified by means of substantive procedures); and

- although only supported by a minority of respondents, the last aspect in the abovementioned table may be afforded consideration by the auditor in this regard in specific circumstances. It is submitted that tests of these controls will provide only corroborative (as opposed to primary) evidence of the relevant aspects of outward reinsurance.

Where controls in the areas in Table 5-19 do not exist or do not appear to be effective, extensive substantive testing should be performed to address the related risks of material misstatement in the financial statements.

Table 5-20 analyses respondents' indications of the internal control-related aspects of **inward** reinsurance (i.e. insurance risks transferred to the insurer by other insurers) that should be assessed and, if possible, tested by the auditor, should reinsurance be material (Question 54).

Table 5-20: Inward reinsurance: control-related aspects to be audited

Control-related aspect	No. of responses
Review by the statutory actuary of cedant's underwriting standards etc. relevant to deriving assumptions	4 and QR
<i>For treaty reinsurance only:</i> monitoring of analysis of cumulative activity by reinsurance agreement compared to expectations	3 and QR
Controls over timeliness and completeness of data received from reinsurers	2 and QR
Procedures for resolution of claims disputes	1

Table 5-20 is arranged in order of the level of support by respondents for each aspect, measured by the number of respondents who indicated each aspect in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, the first three control-related aspects relating to inward reinsurance in Table 5-20 should definitely be assessed and, if possible, tested by the auditor of a listed South African long-term insurer should inward reinsurance be material (although the third aspect received support from a smaller majority than the first two aspects, it received particularly strong support from QR on the basis of the importance of the timeliness and completeness of this data for the actuarial valuation process); and
- although only supported by a minority of respondents, the last aspect in the abovementioned table may be afforded consideration by the auditor in this regard

in specific circumstances. It is submitted that tests of these controls will provide only corroborative (as opposed to primary) evidence of the relevant aspects of inward reinsurance.

Where controls in the areas in Table 5-20 do not exist or do not appear to be effective, extensive substantive testing should be performed to address the related risks of material misstatement in the financial statements.

Also in response to Question 54, the two respondents who indicated that controls over the timeliness and completeness of data received from reinsurers should be assessed and possibly tested by the auditor, indicated that one or a combination of the following audit strategies should be employed to test the timeliness and completeness of this data (the number of respondents who indicated each strategy appears in brackets after the strategy):

- Review by internal audit (2 and QR).
- Performing audit procedures at reinsurers on material agreements and transactions (2).
- Reports from external auditors on internal controls of the cedant (1).

The list above is arranged in order of the level of support by respondents for each strategy, measured by the number of respondents who indicated each strategy in his/her response, and includes input from QR. Although review by internal audit and the performance of certain audit procedures at reinsurers was supported by the majority of respondents (including QR), while the third item received only minority support, the selection of types of audit procedures from the list above depends on the risk of material misstatement involved and the structure of the business of the client and its audit function. All three possibilities are therefore included in the framework developed in this research.

4.5 Processes relating to actuarial assumptions

4.5.1 Introduction

The discussion in Section 2.8: *Monitoring of actuarial assumptions* demonstrates that even a relatively small change or error in assumptions used in the actuarial valuation can have a significant impact on the financial statements of a long-term insurer. SAICA's current *Audit Guide on Long-Term Insurance* (SAICA, 1998a:49) nevertheless currently allows the auditor to accept the statutory actuary's judgement and work in determining assumptions unless other information known to the auditor leads him/her to suspect that they may be unreasonable. The auditor therefore currently has no obligation to perform specific audit procedures in respect of the appropriateness of the assumptions in the South African environment. The author believes that employing this audit strategy may potentially result in a significant increase in audit risk.

Long-term insurers approach the setting of assumptions in different ways. Some insurers have effective systems of internal control to assist in this process, while others do not make use of formal systems of internal control in order to set assumptions. The need for formal systems of internal control in this process is dependent upon, *inter alia*, the inherent risk of material misstatement contained in the assumption-setting process. It should also be borne in mind that, as some of the historical data involved in the setting of assumptions may be located outside the actuarial department of the insurer (e.g. in the in-force database), some of the systems of internal control referred to in this section may also be located outside the actuarial department.

For the reasons above not all processes and controls referred to in this section will necessarily exist within the selected audit clients of all respondents. Where these do not exist or the auditor assesses their design and implementation to be ineffective, the extent of substantive testing should be increased to address the resulting risks of material misstatement.

For insurers that do have systems of internal control involved in the setting of assumptions, the process of setting assumptions can be divided into two significant subprocesses, namely:

- collection of the data underlying the assumptions; and
- derivation of the assumptions from the underlying data.

As the processes involved in and the related internal controls over these two subprocesses differ significantly, the corresponding research findings are discussed separately in the following sections.

4.5.2 Collection of underlying data

Against the above background, respondents were asked whether they believe that a listed South African long-term insurer should have formal accounting and/or financial reporting systems and controls in place for the collection of historical data used in the derivation of significant types of assumptions (Question 55). Responses for each significant type of assumption were as follows (the number of respondents who indicated each type of assumption appears in brackets after the type of assumption):

- demographic parameters (e.g. lapses, surrenders, mortality and morbidity) (4 and QR);
- expenses and (for unitised products) unit expenses (4 and QR);
- financial parameters (e.g. interest rates, investment returns and inflation) (3 and QR);
- regulatory matters (if based on historical data) (e.g. taxation) (3 and QR); and
- business strategy (e.g. volumes of new business) (3 and QR).

The list above is arranged in order of the level of support by respondents for each type of assumption, measured by the number of respondents who indicated each type of assumption in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that listed South African long-term insurers should definitely have formal accounting and/or financial reporting systems and controls in place for the collection of historical data used in the derivation of all the significant types of assumptions in the abovementioned list.

The analysis and interpretation of collective responses to Question 56 indicated that the purpose of these (often computerised) systems should be the collection and analysis of actual (experience) data (*inter alia* from the in-force database) and the comparison thereof to previous and current actuarial assumptions to validate or provide justification for the assumptions (also termed “experience investigations”). Three respondents and QR also indicated that at least the **design** and **implementation** of such systems should be evaluated by the auditor (Question 57), and two respondents indicated that the formal **testing** of the controls over the systems should be part of the overall audit strategy for listed South African long-term insurers (Question 58).

It should be noted that no responses to Questions 56 to 58 were received from the fourth respondent. Data available from other respondents was deemed sufficient to support the conclusion in the following paragraph.

On the basis of these findings it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should at a minimum include an evaluation of the design and implementation of controls over the collection of data underlying the relevant actuarial assumptions. Testing of the operating effectiveness of these controls should also be considered where appropriate. Depending on the expertise of the auditor, an actuarial expert may be required to perform such evaluation and testing. This conclusion was supported by QR.

4.5.3 Derivation of assumptions from underlying data

It should be noted that no responses to the questions referred to in this section were available from the fourth respondent. The responses of the other three responses were deemed sufficient to support the conclusions reached in this section.

Respondents were asked whether they believe that a listed South African long-term insurer should have formal accounting and/or financial reporting systems and controls in place for deriving assumptions from the underlying data (Question 59). Responses for each significant type of assumption were as follows (the number of

respondents who indicated each type of assumption appears in brackets after the type of assumption):

- financial parameters (e.g. interest rates, investment returns and inflation) (3 and QR);
- expenses and (for unitised products) unit expenses (3 and QR);
- demographic parameters (e.g. lapses, surrenders, mortality and morbidity) (3 and QR);
- regulatory matters (e.g. taxation) (3); and
- business strategy (e.g. volumes of new business) (1).

The list above is arranged in order of the level of support by respondents for each type of assumption, measured by the number of respondents who indicated each type of assumption in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that listed South African long-term insurers should definitely have formal accounting and/or financial reporting systems and controls in place for deriving all types of assumptions in the abovementioned list, except business strategy, from the underlying data.

Although supported by only one respondent, assumptions regarding business strategy may also be afforded significant consideration in specific situations. Assumptions regarding, for example, maintenance expenses per product require the allocation of total maintenance expenses to individual products. In situations where significant fluctuations are expected to occur in the number of in-force policies per product, controls over the derivation of assumptions in this regard may be required to ensure that assumptions are reasonable.

The nature of the abovementioned systems will differ for the different types of assumptions, as some assumptions are directly related to the underlying data, whereas others are indirectly derived from the data. An analysis and interpretation of collective responses to Question 60 provided the following examples of types of

financial reporting systems and controls that could provide assurance regarding the derivation of assumptions from the underlying data:

- Regular formal evaluations of the appropriateness of assumptions (supported by QR).
- The provision of formal justification (preferably in writing) by the statutory actuary for all significant assumptions and changes therein (supported by QR).
- Formal approval of assumptions by the board of directors or an appropriate subcommittee (supported by QR).

Three respondents and QR also indicated that at least the **design** and **implementation** of such systems should be evaluated by the auditor (Question 61), while two respondents indicated that formal **testing** of the controls over the systems should be part of the overall audit strategy (Question 62).

On the basis of these findings it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should at a minimum include an evaluation of the design and implementation of controls over the derivation of actuarial assumptions from the underlying data. Testing of the operating effectiveness of these controls should also be considered where appropriate. Depending on the expertise of the auditor, an actuarial expert may be required to perform such evaluation and testing. QR supported this conclusion.

4.6 Processes relating to source data used in the actuarial valuation

The different types of source data used in the actuarial valuation are discussed in Section 3.6: *Knowledge of non-accounting statistical data*. As source data can originate in a number of areas, including the financial accounting systems, other business systems and the valuation masterfiles, effective policies and procedures should be in place to ensure the quality of such data. Due to the volume of transactions in a long-term insurer, an efficient overall audit strategy for policy liabilities arising under insurance contracts and the related earnings should include an assessment and, if feasible, testing of such policies and procedures.

Table 5-21 contains an analysis, based upon responses to Question 63, of transaction cycles (refer to Chapter 4, Section 3.3: *Accounting processes*) that should be considered by the auditor when controls over the validity, accuracy and completeness of the recording of transactions in the in-force database are tested.

Table 5-21: Transaction cycles: recording of transactions in in-force database

Transaction cycle	No. of responses
Underwriting and new business	4 and QR
Renewals and premium collection	4 and QR
Reinsurance	4 and QR
Commission	4 and QR
Policy records	4 and QR
Masterfile maintenance	4 and QR
Claims and maturities	4 and QR
Policy loans and surrenders	4 and QR
Lapses and reinstatements of policies	4 and QR
Administration expenses	4 and QR
Investments (including unitisation of investment portfolios)	3 and QR
Cash receipts	2
Cash payments	2

Table 5-21 is arranged in order of the level of support by respondents for each transaction cycle, measured by the number of respondents who indicated each transaction cycle in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, all but the last two transaction cycles in Table 5-21 should definitely be considered by the auditor of a listed South African long-term insurer when controls over the validity, accuracy and completeness of the recording of transactions in the in-force database are tested; and
- although supported by only a minority of respondents, the last two items in Table 5-21 should definitely also be considered by the auditor in this regard. The smaller support for these transaction cycles can be explained, *inter alia*, by the fact that different insurers record different types of valuation data in different locations and from different sources. As a result, the audit clients on which some respondents obtained their audit experience might not record cash receipt and payment transactions in the in-force database, but elsewhere in the valuation records. It is therefore submitted that these transaction cycles should definitely be tested as part of the overall audit strategy for insurance contracts and the

related earnings of a listed South African long-term insurer, regardless of whether the related transactions are recorded in the in-force database or elsewhere.

The effectiveness of the relevant controls in these transaction cycles have a direct impact on the quality of the source data and therefore on the valuation of policy liabilities and the related earnings.

4.7 Conclusion

This section contained a discussion of the findings of the research relating to overall audit strategies and related matters to be considered in respect of the business and accounting processes and related internal controls of the long-term insurance audit client.

It is important to note that the framework developed in this and the next chapters recognises that the auditor can decide to ignore the operating effectiveness of internal controls of the audit client in certain areas, consequently evaluate control risk to be at a maximum level (100%) and perform extensive substantive tests to maintain audit risk at an acceptable level. In this regard, it should be noted that the promulgation of the Sarbanes-Oxley Act in the United States of America has resulted in an increased focus by auditors on tests of control as a result of a requirement to express an audit opinion on the quality of internal financial controls of listed companies. Although the abovementioned act does not have a direct impact on the vast majority of South African companies (including long-term insurers), it might in future result in a stronger focus of auditors on tests of controls as opposed to substantive testing in certain areas.

In South Africa, a strong focus on sound corporate governance is currently visible in, *inter alia*, suggestions for the reform of corporate law in South Africa (South Africa, 2004). Directors' responsibilities for sound corporate governance include the responsibility for proper financial reporting. Directors discharge this responsibility, *inter alia*, by the design, implementation and monitoring of effective internal financial controls within the company. In addition to the impact of the Sarbanes-Oxley Act on

South African auditing practices, the abovementioned focus on corporate governance might similarly result in a stronger focus of South African auditors on tests of controls.

The next section contains a discussion of the research findings relating to the application of the concept of materiality in the audit of listed South African long-term insurers.

5. FINDINGS RELATING TO MATERIALITY

5.1 Introduction

This section contains an analysis, interpretation and discussion of responses relating to materiality. Various aspects of materiality in the audit of a long-term insurer are discussed in Chapter 1, Section 2.3.4: *Materiality* and should be considered as background to the contents of this section. Although the concept of materiality is pervasive to all components of the financial statements of a long-term insurer and not restricted only to insurance contracts and the related earnings (the scope of this research), a discussion of this matter is included in recognition of the potentially significant impact of policy liabilities arising under insurance contracts and the related earnings on materiality and *vice versa*.

5.2 Research findings

In determining planning materiality, the auditor should consider the needs of significant users of the financial statements (Boynton, *et al.*, 2001:286 and Puttick & Van Esch, 2003:136). Table 5-22 contains an analysis of responses relating to the identification of significant stakeholders in and consequently users of the financial statements of listed South African long-term insurers (Question 65).

Table 5-22: Significant users of financial statements

Users of financial statements	No. of responses
Shareholders	4 and QR
Investment analysts	4 and QR
Financial Services Board	4 and QR
Management of the company	4 and QR
Policyholders	3 and QR
South African Revenue Service	3 and QR

Table 5-22 is arranged in order of the level of support by respondents for each significant user, measured by the number of respondents who indicated each significant user in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that, when determining planning materiality, the auditor of a listed South African long-term insurer should definitely consider the needs of all the users of the financial statements of long-term insurers in Table 5-22.

In addition to the users in Table 5-22, QR also suggested that employees of the company are significant users of the financial statements of listed South African long-term insurers. This view expressed by QR was treated as a minority view for the following reasons:

- although respondents were given the opportunity to add any significant users of the financial statements to the list provided in the questionnaire, none added employees; and
- in the experience of the author, the majority of employees of long-term insurers do not have a proper understanding of the complex annual financial statements of a long-term insurer and therefore rely on other sources (e.g. employee reports) for their information needs. The complexity of financial reporting in the annual financial statements of South African long-term insurers is discussed in Chapter 1, Section 2.3.2: *Complexity of accounting for and presentation of long-term insurance activities*. Due to this complexity and the vast differences between these financial statements and those of companies in other industries, employees other than highly financially literate staff members satisfy their information requirements by means of simplified financial information provided by management in, *inter alia*, employee reports.

Because of the fact that the financial statements of a long-term insurer combine the interests of shareholders and policyholders, the balance sheet contains relatively high balances compared to the totals of classes of transactions appearing in the income statement. Basing materiality for the financial statements as a whole on an income statement component will therefore result in a relatively low materiality figure compared to a materiality figure based on a balance sheet component. Practice Note 20: *The audit of insurers in the United Kingdom* (APB, 1999:SAS220.6) (PN 20) suggests that this issue can be resolved by using different materiality figures for the income statement and the balance sheet.

This approach is, however, contradictory to the recommendation that was contained in the (subsequently withdrawn but never replaced) Discussion Paper 6: *Audit risk and materiality* (SAICA, 1984:para. 32) (DP 6), namely that, in such cases, the lower of the two materiality figures should be used. Although DP 6 had been withdrawn, the recommendations contained in it are still regarded to be useful (inferred from Marx, *et al.*, 2004:8-22).

The abovementioned approach also contradicts the recommendation in a current exposure draft entitled *Proposed International Standard on Auditing 320 (revised) - materiality in the identification and evaluation of misstatements* (IAASB, 2004b:para.11), recently issued by the International Auditing and Assurance Standards Board, namely that the auditor should determine a single materiality level for the financial statements as a whole.

Only one respondent indicated that a single planning materiality figure should be used in the audit of a listed South African long-term insurer, whereas three respondents indicated that multiple materiality figures should be used (Question 66), namely different materiality figures for the balance sheet and the income statement. QR, however, supported the minority view of using a single materiality figure.

Respondents indicated that the following financial statements should be used as the bases for determining planning materiality (Question 67) (the number of respondents who indicated each basis appears in brackets after the basis and includes input from QR):

- Income statement only (1 and QR).
- Balance sheet only (0).
- Combination of income statement and balance sheet (i.e. different materiality figures for the balance sheet and income statement) (3).

In follow-up interviews, the use of different materiality figures for the balance sheet and the income statement was discussed with the relevant respondents in the light of the above information. Transactions (e.g. premium receipts) relating to some types of contracts affect the balance sheet only and have no direct effect on earnings. The receipt and subsequent investment of a premium on an investment contract, for example, is effectively debited to the relevant investment portfolio and credited to policy liabilities. Transactions relating to other types of insurance contracts have a direct impact on earnings, for example the receipt and investment of risk premiums on non-participating conventional business, which are debited to the relevant investment portfolio and credited to earnings.

In the above example it may be appropriate to use a (higher) balance sheet-based materiality figure for account balances and classes of transactions that affect only the balance sheet, and another (lower) materiality figure for account balances and classes of transactions that affect both the balance sheet and income statement or only the income statement.

On the basis of the findings of this research, it can be concluded that the method described in the previous paragraph should be used with caution and only for insurers where:

- the impact of each significant account balance and class of transactions on the balance sheet and income statement are clearly discernable from the accounting and other records of the insurer; and

- the auditor has sufficient knowledge and understanding of the business and accounting systems to be able to classify each significant account balance or class of transactions accurately into one of two categories, namely:
 - affecting only balance sheet; or
 - affecting balance sheet and income statement or only income statement.

Where the abovementioned prerequisites for the use of multiple materiality figures cannot be met, a single (lower) income statement-based materiality figure should be used. QR supported this conclusion.

DP 6 proposed a number of potential bases for the determination of planning materiality (refer to SAICA, 1984:para. 106). Respondents indicated that the following of these bases should normally be used for determining planning materiality for a listed South African long-term insurer (Question 68) (the number of respondents who indicated each basis appears in brackets after the basis and includes input from QR):

- Net profit before taxation (4 and QR).
- Total assets (3).

The difference between the number of responses for each of the options in the list above is caused by the one respondent who indicated that an income statement basis only should be used for setting planning materiality, whereas the other three respondents indicated that a combination of a balance sheet and income statement basis is appropriate and therefore indicated both items.

It should be noted that, should any abnormal circumstances (e.g. losses or going concern problems) have an impact on the financial statements, a different basis might be more appropriate. The selection of such basis requires the professional judgement of the auditor.

PN 20 (APB, 1999:SAS220.4) states that, as the income statement of a British long-term insurer shows the relevant amounts both gross and net of reinsurance, materiality should be considered at both levels. If material, reinsurance premiums and benefits are also required to be separately disclosed in South Africa, both prior to

the withdrawal of AC 121 (SAICA, 1994:para. .26-.27) and thereafter, by IRFS 4 (IASB, 2004b:para. 14(d)(ii)). IFRS 4 also disallows the offsetting of reinsurance assets and liabilities against the related policy liabilities with effect from 1 January 2005 (IASB, 2004b:para. 14(d)(i)).

Respondents were therefore asked whether the auditor should add back the effect of reinsurance on the basis used in the calculation of planning materiality (Question 69). Two respondents indicated that the effect of reinsurance should be added back, whereas the other two respondents indicated that it should not be added back. In follow-up interviews with three of the respondents, however, they all indicated that the effect of reinsurance should be added back where it results in a lower (more conservative) materiality figure. On the basis of these findings it can be concluded that the impact of reinsurance on the basis used to determine planning materiality should be added back in the audit of a listed South African long-term insurer if it would result in a significantly lower, more conservative materiality figure. QR supported this conclusion.

The determination of materiality takes into account both quantitative and qualitative factors (refer to Marx, *et al.*, 2004:8-22; Boynton, *et al.*, 2001:286; Puttick & Van Esch, 2003:136 and Whittington & Pany, 2004:184). The findings in the first part of this section have focused largely on quantitative matters. With regard to qualitative considerations, the analysis and interpretation of collective responses to Questions 70 and 71 provided the following examples of industry-specific qualitative factors that should be considered in determining planning materiality (a brief description of the impact of each factor on materiality appears in brackets after the factor):

- Business risk of a long-term insurer as provider of financial services (lower planning materiality).
- The fact that the South African long-term insurance industry is a regulated industry (lower planning materiality).
- The fact that the insurers referred to in this research are listed companies, the financial statements of which are exposed to public scrutiny (lower planning materiality).

- The product and sales mix of the insurer. Should an insurer sell small volumes of high-value insurance contracts, each customised to meet the requirements of the customer, it increases the risk of error in each individual contract, effectively requiring each individual contract to be subjected to customised audit testing (lower planning materiality).
- The detailed complex actuarial disclosures of a long-term insurer increase the risk of material misstatement (lower planning materiality).
- The fact that, due to regulatory prudential capital adequacy requirements, the going concern risk (refer to Chapter 1, Section 2.3.6: *Going concern risk*) of a listed South African long-term insurer is generally lower than that of companies in many other industries (higher planning materiality).

QR supported all the abovementioned qualitative factors and their impact on planning materiality.

AuG-15: Audit of actuarial liabilities of life insurance enterprises (CICA, 1993:para. 20) (AuG-15) mentions that, although materiality is a fundamentally important concept for both the auditor and the statutory actuary of a long-term insurer, these two parties may differ in their determination and application of the concept of materiality. When evaluating and possibly relying on the work of the statutory actuary, the auditor should therefore gain an understanding of the latter party's view of materiality and possibly also disclose the auditor's view of materiality to the statutory actuary.

The latter disclosure by the auditor may, however, increase audit risk. The client may use the knowledge of the audit materiality level to "hide" fraudulent financial reporting by committing such fraud by means of multiple "small" transactions that may not be discovered by the audit process. Instead of disclosing the amount of materiality to the statutory actuary, the auditor can consider discussing only the basis used in determining planning materiality with the statutory actuary.

Different auditing firms have different views regarding the discussion of planning materiality with audit clients, depending on their standard risk management

procedures. As a result, differences of opinion among respondents in this regard were expected.

Two respondents, as well as QR indicated that they discuss the **basis** for determining planning materiality with the statutory actuary, while two respondents indicated that they do not (Question 72). On the basis of the majority view it can be concluded that it is acceptable practice for the auditor of a listed South African long-term insurer to discuss the basis used to determine planning materiality with the statutory actuary, provided that the risk management procedures of the auditing firm allow this practice.

Table 5-23 contains an analysis of responses relating to whether the **amounts** of planning materiality and tolerable error (the amount used to apply planning materiality at the individual account balance, class of transactions and disclosure level) are disclosed to the statutory actuary on the selected audits of respondents (Questions 73 and 74).

Table 5-23: Disclosure of materiality and tolerable error amounts to statutory actuary

Amount	No. of responses		
	Yes	No	Total
Planning materiality	2	2	4
Tolerable error	0	4	4
Key:			
Yes = Number of respondents indicating that the amount is disclosed to the statutory actuary			
No = Number of respondents indicating that the amount is not disclosed to the statutory actuary			

On the basis of the views of at least half of the respondents (two out of four) in Table 5-23, it can be concluded that auditors of listed South African long-term insurers can consider disclosing the amount of planning materiality to the statutory actuary of the insurer, whereas the amount of tolerable error should definitely not be disclosed to the statutory actuary. As was mentioned above, the risk management procedures of the particular auditing firm should be complied with in this regard.

5.3 Conclusion

This section contained a discussion of the findings of the research relating to the application of the concept of materiality in the audit of listed South African long-term insurers.

A discussion of the research findings relating to various aspects of the nature of audit procedures to be considered as part of the overall audit strategy for listed South African long-term insurers is contained in the next section.

6. FINDINGS RELATING TO THE NATURE OF AUDIT PROCEDURES

6.1 Introduction

The definition of an audit program (or audit plan) in the *Glossary of Terms* issued by the IAASB (2004a:3) refers to three important characteristics of audit procedures developed as part of an overall audit strategy, namely their nature, timing and extent. This section contains an analysis, interpretation and discussion of the responses relating to the **nature** of audit procedures in respect of policy liabilities arising under insurance contracts and the related earnings. Findings relating to the **timing** of audit procedures are discussed in Section 7: *Findings relating to the timing of audit procedures*. The **extent** of tests of controls as well as substantive tests is the result of, *inter alia*, the risk of material misstatement of the particular assertion related to the account balance or class of transactions (refer to IAASB, 2005j:para. 8). The extent of audit procedures is therefore specific to each audit client's circumstances and is consequently not directly addressed in the framework developed in this research.

Both the nature and the timing of audit procedures performed by the external auditor may be affected by consideration of the work performed by the internal audit function of the client. Section 8: *Findings relating to reliance on the work of internal audit* contains an analysis and discussion of the findings of the research relating to this aspect.

AuG-15 describes the valuation of policy liabilities to include the following steps (CICA, 1993: para. 8):

- development of assumptions;
- identification and assembly of source data required for the valuation of each product type;
- calculation of the actuarial liability on the basis of assumptions and source data for each product type;
- aggregation of actuarial liabilities of all product types into total policy liabilities;
- validation of the valuation result; and
- reporting the results of the valuation.

In order to express an audit opinion on the financial statements of a long-term insurer that include policy liabilities and the related earnings, the auditor should perform risk assessment procedures and, on the basis of these, audit procedures, including tests of controls and substantive procedures, on each of these steps. Respondents indicated that, in their views, the auditor should perform audit procedures on the following aspects of the actuarial valuation process of a listed South African long-term insurer (Question 75) (the number of respondents who indicated each aspect appears in brackets after the aspect and includes input from QR):

- Appropriateness of the assumptions (4 and QR).
- Controls and procedures to ensure completeness, accuracy and integrity of the source data (4 and QR).
- Calculation and aggregation of the actuarial liabilities (4 and QR).
- Validation of the valuation results (including the analysis of surplus discussed in Section 6.3.2: *Underlying data*) (3 and QR).
- Completeness and accuracy of the reporting of the valuation results (3 and QR).

On the basis of the majority view it can be concluded that the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings of a listed South African long-term insurer should definitely cover all these aspects. Depending on the expertise of the auditor, an actuarial expert may have to be involved in the execution of such strategy.

The remainder of this section includes a discussion of each of these aspects.

6.2 Valuation methods

Section 2.7: *Product profiles* contains a discussion of the primary valuation methods used by the selected audit clients of respondents for each major type of insurance contract, whereas Section 3.3: *Knowledge of bases of valuation and profit entitlement policies* contains a discussion of the methods to be employed by the auditor to obtain or update his/her understanding of the bases of valuation.

An analysis and interpretation of the collective responses to Question 76 indicated the following possible audit strategies, one or a combination of which should be employed to assess the appropriateness of the primary valuation method used for each significant product type:

- Review of compliance with the relevant Professional Guidance Notes issued by the ASSA (also refer to Section 3.4.2: *Actuarial guidance*).
- Comparison of valuation bases with local and international best practice.
- Inspection of approval of valuation bases by the board of directors.

QR supported all the audit strategies in the abovementioned list.

The implementation of these audit strategies may require the involvement of an actuarial expert. Suggested audit strategies in this regard are discussed in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

Due to the magnitude of policy liabilities on the balance sheet and the relationship between movements in policy liabilities and the earnings of a long-term insurer, a change in valuation method can have a potentially material impact on the financial statements. An analysis and interpretation of collective responses to Question 77 indicated the following possible audit strategies, one or a combination of which should be employed to assess the impact of changes in valuation methods on the financial statements:

- Review of the client's calculation of the impact of the change on the financial statements (the involvement of an actuarial expert may be required).

- Assessment of the appropriateness of the client's accounting treatment of the changes (e.g. the classification of each change as either a change in accounting estimate or a change in accounting policy). QR also supported this audit strategy.

ISA 545: *Auditing fair value measurements and disclosures* (IAASB, 2005d) requires the auditor to consider whether the client has complied with the disclosure requirements in respect of changes in fair value valuation methods. Applying this requirement to the audit of a long-term insurer, all respondents indicated that the overall audit strategy should include audit procedures to evaluate the disclosure of changes in the valuation method and actuarial assumptions (Question 207). This finding corroborates the findings in the previous paragraph, namely that the appropriateness of the accounting treatment of changes in valuation methods should be assessed by the auditor.

6.3 Assumptions

6.3.1 Introduction

Section 2.8: *Monitoring of actuarial assumptions*, Section 3.5: *Knowledge relating to actuarial assumptions* and Section 4.5: *Processes relating to actuarial assumptions* contain discussions of various aspects relating to actuarial assumptions and should be read with this section for contextualisation.

Given the potentially material impact of inappropriate actuarial assumptions on policy liabilities arising under insurance contracts and the related earnings, three respondents and also QR indicated that extensive substantive audit procedures should be performed on the appropriateness of assumptions, while the fourth respondent indicated that a moderate level of substantive work, supplemented by a review by the actuarial expert, should be performed (Question 78).

These findings rightfully contradict the fact that the current guidance for auditors of South African long-term insurers allows the auditor to accept the assumptions determined by the statutory actuary, except if a reason exists to believe that they are

inappropriate (refer to Section 4.5: *Processes related to actuarial assumptions*), and thus clearly demonstrates the need for the existing guidance to be updated.

Section 4.5: *Processes related to actuarial assumptions* distinguishes between the subprocesses of collecting data underlying the assumptions and deriving the assumptions from the underlying data. This distinction has also been applied in the next sections.

6.3.2 *Underlying data*

An analysis and interpretation of collective responses to Question 79 indicated that the nature of audit procedures that should be performed on the data underlying the assumptions is as follows:

- The controls over the extraction of data from its sources should be tested. Section 4.5.2: *Collection of underlying data* contains a discussion of the accounting and/or financial reporting systems and controls relating to such data. These tests of controls often comprise mainly enquiry, observation and a review of documentation (CICA, 1993:para. 45).
- Data underlying assumptions about financial parameters should be compared to available information from external sources.
- Data underlying assumptions about expenses and demographic parameters should be agreed or reconciled to other audited information, or client reconciliations tested. It is logical to conclude that this audit strategy should also be followed for data underlying assumptions regarding business strategy (e.g. volumes of new business).

Section 4.5.2: *Collection of underlying data* contains examples of the types of assumptions referred to in the previous paragraph. The involvement of an actuarial specialist may be required to perform some of these procedures.

Certain assumptions (e.g. mortality and morbidity) should be based on or take into account the actual historical experience of the insurer (ASSA, 2004:para. 5.4). The statutory actuary performs periodic experience investigations to obtain this information. An analysis and interpretation of collective responses to Question 80

indicated that respondents proposed the following audit strategies, one or a combination of which should be used for testing the accuracy and integrity of experience investigations:

- An actuarial expert should evaluate the integrity of the experience investigation methodology and process.
- Results of experience investigations should be compared or reconciled to other audited data (e.g. death and disability claims).
- Results of experience investigations should be corroborated with reference to other related available information (e.g. the analysis of surplus as discussed later in this section, results of experience investigations in prior years and available industry information).

QR supported all audit strategies in the abovementioned list.

All respondents also indicated that, as part of the overall audit strategy for assumptions, the auditor should compare the relevant assumptions used in the past to actual historical experience since the setting of each assumption and obtain explanations for significant variances (Question 81). QR supported this conclusion. This strategy provides the auditor with audit assurance regarding the quality and consistency of assumptions. Depending on the auditor's experience, the assistance of actuarial experts may be required to perform these procedures.

Actual historical experience regarding demographic parameters (e.g. lapses and surrenders) is often reflected in a decrements listing prepared by the actuarial department of the insurer. This listing includes all policies the status of which was changed from "in-force" (i.e. active) to "out-of-force" (i.e. inactive) during the course of a financial year and can provide useful audit evidence regarding this data and consequently the appropriateness of the related assumptions. In a report following the investigation of Fedsure Life (refer to Chapter 1, Section 2.1: *The South African long-term insurance industry*), recommendations were made to the Financial Services Board to require that a reconciliation between in-force policies at the beginning and end of each month should be compulsory (FSB, 2005:157). Although not yet required by the Financial Services Board, a decrements listing effectively provides such a reconciliation.

All respondents and QR indicated that the overall audit strategy should include a review of the reconciliation between the in-force database and the decrements listing (Question 100). An analysis and interpretation of collective responses to Question 101 also indicated that the audit strategy should include the following types of audit procedures, one or a combination of which should be used to test the accuracy of the decrements listing:

- Where possible, comparison or reconciliation of information in the decrements listing with audited accounting information (supported by QR).
- Analytical procedures comprising a review of the information in the decrements listing in relation to the movements analysis in the analysis of surplus. The analysis of surplus is discussed later in this section (supported by QR).

The proper allocation of the administration expenses relating to insurance contracts between acquisition expenses (once-off expenses incurred during the process of acquiring and issuing the contract) and maintenance expenses (ongoing expenses incurred in administering the contract) is important source data for the setting of actuarial assumptions. As prospective valuations are based on the projection of future cash flows relating to each insurance contract, (ongoing) maintenance expenses should be projected, but not (once-off) acquisition expenses, as the latter have been incurred but will not recur in future. An incorrect allocation of total administration expenses between acquisition and maintenance expenses can therefore have a significant impact on the valuation of policy liabilities arising under insurance contracts and the related earnings.

An analysis and interpretation of collective responses to Question 64 indicated that the correctness of the allocation of expenses between acquisition and maintenance expenses should be tested by the auditor by means of a combination of tests of the relevant controls, substantive analytical procedures and substantive tests of details, appropriate for the client's procedures and controls in this regard. QR supported this conclusion. Depending on the expertise of the auditor, an actuarial expert may have to be involved to perform these procedures.

The actuarial department of the insurer often prepares an analysis to explain the movement of the total net surplus of assets over liabilities of the insurer from one financial year to the next (analysis of surplus) (APB, 1999:SAS420.18). This analysis contains elements such as experience variations (actual lapse experience, for example, is higher than was previously assumed) and changes in valuation methods (refer to Section 6.2: *Valuation methods*) that can provide useful audit evidence regarding the reasonableness of assumptions (APB, 1999:SAS420.18). In a report following the investigation of Fedsure Life (refer to Chapter 1, Section 2.1: *The South African long-term insurance industry*), recommendations were made to the Financial Services Board to require a compulsory analysis of surplus by all South African long-term insurers as part of their regulatory returns to the Registrar of Long-Term Insurance (FSB, 2005:161). These recommendations are, however, still under consideration by the Financial Services Board and have not been implemented.

An analysis and interpretation of collective responses to Question 82 indicated that respondents regarded the following information in the analysis of surplus as significant for audit purposes:

- Changes in actuarial valuation methods and models (these are discussed in more detail in Section 6.6: *Actuarial calculations*) (supported by QR).
- Changes in actuarial assumptions (supported by QR).
- Variations from expected sources of profit for all significant items included in the analysis of surplus (e.g. investment experience and mortality and morbidity experience) (supported by QR).

The extent of audit reliance placed on these items in the analysis of surplus should determine the extent of audit testing of the completeness and accuracy of the analysis as contained in the overall audit strategy.

6.3.3 *Derivation of assumptions*

Whereas the discussion in the previous section focused on the data underlying the actuarial assumptions, this section focuses on the derivation of the assumptions from this underlying data.

The actuarial assumptions are intended to represent the long-term view of the statutory actuary and are determined by taking account of underlying data discussed in Section 6.3.2: *Underlying data*. As such, they are not necessarily derived directly (mathematically or statistically) from the underlying data. The overall audit strategy in this regard should therefore focus on the reasonableness and appropriateness of the assumptions as derived by the statutory actuary by taking the underlying data into consideration. As a result of their technical actuarial nature and depending on the relevant expertise and experience of the auditor, the execution of many of the overall audit strategies discussed in this section may require the involvement of an actuarial expert in the audit process.

An analysis and interpretation of collective responses to Question 83 indicated that respondents proposed the following audit strategies, all supported by QR, for testing that the actuarial assumptions are reasonable and appropriate:

- Performing audit procedures to test the underlying data, as discussed in Section 6.3.2: *Underlying data*.
- Evaluation of the processes and procedures used by the statutory actuary to determine assumptions.
- Review of the conclusions of the statutory actuary in respect of assumptions for reasonableness and appropriateness, taking into account the audited underlying data.

PN 20 (APB, 1999:SAS520.12) states that, to assess the reasonableness of actuarial assumptions, the auditor may review the results of sensitivity analyses performed by management on assumptions or, if deemed necessary, reperform sensitivity analyses using different assumptions. The extent of audit reliance placed on sensitivity analyses should determine the extent of audit testing of the analyses contained in the overall audit strategy.

No respondents indicated that reperformance of sensitivity analyses is appropriate in the audit of a listed South African long-term insurer. QR also indicated that such reperformance would be inappropriate. All respondents and also QR did indicate, however, that the relevant sensitivity analyses should be reviewed for

reasonableness as audit evidence corroborating the results of other audit procedures (Question 84).

It can therefore be concluded that, in the audit of listed South African long-term insurers, the results of sensitivity analyses on assumptions should be considered a source of corroborative rather than primary audit evidence. This conclusion was supported by QR.

If expected future cash outflows relating to policy liabilities are not properly matched to cash inflows from the underlying investments, significant profits and losses can result. In this regard, all respondents indicated that the overall audit strategy should include a review of investment management mandates or agreements for each significant type of insurance contract to assess whether expected future cash inflows and outflows are appropriately matched (Question 200). To test the degree of matching between the expected future cash flows related to policy liabilities and the underlying investments, an analysis and interpretation of collective responses to Question 201 indicated that calculations and analyses performed by the client should be reviewed and followed up by enquiries about unexpected results, including:

- A comparison between the relevant retrospectively valued policy liabilities and the related investment shortfalls (enquiry about any unexpected investment shortfalls).
- A comparison between expected annuity cash outflows and the related investment income flows.
- A review of relevant information presented to the investment committee or its equivalent of the insurer.

In determining the interest rates used to value policy liabilities, the actuary should take into account the likely future returns on the investments underlying the liabilities (ASSA, 2004:para. 5.6). The valuation of annuity contracts and insurance contracts providing investment return guarantees and the impact thereof on earnings are particularly sensitive to the yield on investments. If the interest rate used to discount future annuity-related and guarantee-related cash flows in calculating the related policy liabilities is not supported by the investment yield on the underlying assets, a material misstatement of policy liabilities and the related earnings could result.

In this light, an analysis and interpretation of collective responses to Questions 85 and 86 suggested the following audit strategies, both supported by QR, to test the reasonableness of the yield on investment portfolios underlying annuity products and insurance contracts providing investment return guarantees:

- Tests of the relevant controls in the investment process and relevant substantive tests performed on investments, including the allocation of investment returns to the investment portfolios underlying the related insurance products.
- Agreement of the discount rate used in valuing the policy liabilities arising under the relevant insurance contracts with the risk-free rate used in the valuation of underlying investments.

The most significant element of future cash outflows relating to annuity contracts is the payment of annuity instalments at regular intervals to the policyholder. As they generally supply cash inflows on a similar basis, interest-bearing investments (e.g. government bonds) and properties serve as appropriate investment vehicles for the underlying investments. Should an investment vehicle default on its interest or rental payments (as a result of credit risk), mismatching of investment and liability cash flows and a resulting loss occur. An analysis and interpretation of collective responses to Question 87 suggested the following audit strategies, both supported by QR, to test that the margins included in the discount yield used to value annuity contracts are sufficient to cover the best estimate of the cost of future defaults:

- Enquiry from management.
- Review of the underlying investments to assess credit risk exposure.

Participating insurance contracts are described in Section 2.7: *Product profiles*. Actuarial assumptions relating to the extent of future bonus declarations should take into account the reasonable expectations of policyholders regarding future bonus rates (ASSA, 2001b:para. 2.10). This requirement results from the obligation of the statutory actuary to include in the valuation of policy liabilities any liability arising from the requirement to treat policyholders fairly (ASSA, 2004:para. 3.5). PGN 106: *Actuaries and long-term insurance business in South Africa* (ASSA, 2004:para. 7.5(e)) requires the statutory actuary to report his/her interpretation of the reasonable expectations of policyholders to the board of directors of the insurer. An

analysis and interpretation of collective responses to Question 117 suggested the following methods, all supported by QR, to be used by the auditor to assess the impact of economic conditions and other factors on policyholders' reasonable expectations of future bonus rates:

- Discussion with the management of the actuarial function and, in particular, the statutory actuary.
- Review of the relevant documentation prepared for the board of directors, including papers on bonus philosophies and the governance of smoothed bonus products.
- Evaluation of the relationship between past bonus declarations and relevant factors (e.g. a comparison of past bonus rates with the difference between investment returns and expenses in the relevant portfolios).

Policyholders' reasonable expectations are also affected by quotations issued by the insurer as part of the process of selling an insurance contract to a potential policyholder. In response to Question 204, however, only one respondent indicated that the overall audit strategy should include testing that quotations to potential policyholders comply with the product design and pricing approved by the statutory actuary and management during the product development process (refer to Chapter 4: *Selected processes affecting policy liabilities and the related earnings*). On the basis of the majority view it can therefore be concluded that the overall audit strategy for insurance contracts and the related earnings should under normal circumstances not include testing the compliance of quotations with the approved product design and pricing. QR supported this conclusion. One of the reasons for the majority view, discovered during follow-up interviews, is the view that policyholders' reasonable expectations are more directly affected by investment returns and performance than by original quotations to prospective policyholders.

In response to Question 118, respondents indicated that the overall audit strategy should include the following procedures to test that policyholders' reasonable expectations have been properly reflected in the actuarial assumptions regarding future bonuses (the number of respondents who indicated each procedure appears in brackets after the procedure and includes input from QR):

- Enquiries from management, including the statutory actuary (4 and QR).

- Review of complaints from policyholders to the insurer (3 and QR).
- Review of correspondence with the Ombudsman of long-term insurance (2 and QR).

On the basis of the majority view it can be concluded that all procedures in the abovementioned list should definitely be included in the overall audit strategy of listed South African long-term insurers to test that policyholders' reasonable expectations have been properly reflected in the actuarial future bonus rate assumptions.

PGN 104 (ASSA, 2001b:para. 1.4) requires policy liabilities under insurance contracts to be based on the actuary's realistic ("best estimate") assumptions, increased by certain prescribed and second-tier margins. All respondents indicated that the audit strategy should include testing that prescribed margins and appropriate second-tier margins have been added to the best estimate assumptions for the actuarial valuation (Question 141).

Second-tier margins are introduced at the discretion of the statutory actuary for the prudent release of profits to shareholders and to ensure that profits are released to shareholders in accordance with the design of the insurance product and company practice. The reason for the existence of second-tier margins and their broad effect on the financial statements require disclosure in the annual report of a South African long-term insurer (ASSA, 2001b:para. 2.16). The subjective nature of these margins renders them complex and they are also often poorly disclosed (Scanlon & Kirk, 2004:6). As a result of their potentially significant impact on policy liabilities arising under insurance contracts and the related earnings, the auditor should obtain sufficient appropriate audit evidence that these discretionary margins are reasonable and that they are consistently applied from one financial year to the next (as should be the case with any provision or other judgemental area in financial statements).

An analysis and interpretation of collective responses to Question 88 indicated that, to **identify the existence of second-tier margins**, the sources of profit analysed in the analysis of surplus (refer to Section 6.3.2: *Underlying data*) should be reviewed and unexpected sources should be followed up by means of enquiry from management. QR supported this view. Respondents also indicated that the

management representation letter discussed in Section 6.9.1: *Management representations* should include representations regarding management's agreement with second-tier margins. QR supported this view.

To evaluate whether second-tier margins are **consistent with policy design and company practice** and **released prudently and consistently to earnings** from one financial year to the next, an analysis and interpretation of collective responses to Questions 89 and 90 indicated that the treatment of second-tier margins should be assessed for compliance with the profit entitlement policies of the insurer (refer to Section 6.4: *Profit entitlements and earnings*). Any apparent anomalies should be followed up by means of enquiries from management.

Respondents also indicated that a review by the auditor of the relevant actuarial documentation is useful in executing the audit strategies suggested in the previous two paragraphs.

The extensive nature of audit procedures deemed necessary by respondents in respect of assumptions as discussed in this section supports the view expressed in Section 6.3.1: *Introduction* that existing guidance for auditors should be amended to require a stronger focus on actuarial assumptions.

6.4 Profit entitlements and earnings

Section 2.7: *Product profiles* includes a discussion of the concept of profit entitlement policies and a description of the diverse range of policies used by the selected audit clients of respondents, and concludes that the overall audit strategy should include an evaluation of the appropriateness and proper, consistent application of these policies. Section 3.3: *Knowledge of bases of valuation and profit entitlement policies* in turn includes an analysis and interpretation of respondents' views on methods to be used by the auditor to obtain an understanding of the profit entitlement policies used by the client.

The profit entitlement policies per product type described in Section 2.7: *Product profiles* can be stratified into policies for the recognition and measurement of the following main categories of profits and losses:

- Risk profits and losses (risk premiums less the related risk benefits).
- Profits and losses calculated on a fee income less related expenses basis.
- Asset mismatch profits and losses (refer to Section 6.3.3: *Derivation of assumptions*).

An analysis and interpretation of collective responses to Question 91 suggested the following audit strategies, all supported by QR, one or a combination of which should be used to test that the profit entitlement policies relating to **risk profits and losses** are accurately and consistently applied:

- Tests of controls over premiums and policy benefits.
- Substantive tests on outstanding premiums and policy benefits payable.
- Analytical procedures on risk profits and losses in the analysis of surplus.

An analysis and interpretation of collective responses to Question 92 suggested the following audit strategies, all supported by QR, one or a combination of which should be used to test that the profit entitlement policies relating to **profits and losses calculated on a fee income less expenses basis** are accurately and consistently applied:

- Tests of controls over the renewals process (refer to Section 3.2: *Knowledge of product types* for a description of renewals).
- Substantive tests on fee income and expenses, including their allocation to product types.
- Analytical procedures on fee income and expenses.

An analysis and interpretation of collective responses to Question 93 suggested the following audit strategies, all supported by QR, one or a combination of which should be used to test that the profit entitlement policies relating to **asset mismatch profits and losses** are accurately and consistently applied:

- Tests of controls over and substantive tests on the allocation of investment assets and investment returns to product portfolios.

- Substantive tests on calculation of profits and losses (movement in investment assets less movement in the related prospective liabilities should equal the asset mismatch profits and losses).

Depending on the expertise of the auditor, the involvement of an actuarial specialist may be required to execute these audit strategies.

The actuarial department of a long-term insurer may prepare an analysis of the sources of and trends in the earnings for each financial year (analysis of current year's earnings), including items such as risk profits, investment profits and asset mismatch profits to check the reasonableness of certain elements of the actuarial valuation (refer to AICPA, 2003:175 and CICA, 1993:para. 39). Although some element of overlap exists, this analysis is prepared in more detail than, and should not be confused with, the analysis of surplus as discussed in Section 6.3.2: *Underlying data*.

As the analysis of the current year's earnings can provide useful corroborative audit evidence regarding the proper application of profit entitlement policies, all respondents and QR indicated that the overall audit strategy should include a review of the analysis (Question 94). Three respondents and QR indicated that the audit partner should be responsible for this review (Question 95). One of these respondents (also supported by QR) indicated that the actuarial expert should be involved in the review with the audit partner. The fourth respondent indicated that the actuarial expert should be responsible for the review. These findings reflect the complexity and relative importance of this element of the overall audit strategy. On the basis of the majority view it can be concluded that the audit partner should definitely be responsible for the review, and should rely on the work of an actuarial expert to the extent deemed necessary. QR supported this conclusion.

An analysis and interpretation of collective responses to Question 96 suggested the following audit strategies, all supported by QR, to test the accuracy of the analysis of the current year's earnings:

- Discussion with the statutory actuary.

- Analytical procedures, including a review by the actuarial expert of the reasonableness of the roll-out of assumptions at significant individual product level.
- Assessment of consistency with accounting profit.

The extent of audit reliance placed on a review of the analysis of the current year's earnings should determine the extent of audit testing of the analysis contained in the overall audit strategy.

In conclusion, it is clear from the findings discussed in this section that the proper and consistent application of profit entitlement policies and analysis of the current year's earnings require sufficient attention as part of the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings.

6.5 Source data

6.5.1 Introduction

Section 2.6: *Transaction processing and audit trails* contains a discussion of the relationship between the in-force database and the valuation masterfiles of a long-term insurer and provides important background information contextualising the contents of this section. The statutory actuary is responsible for ensuring that the source data used in the actuarial valuation process is accurate (ASSA, 2004:para. 5.1). The auditor should perform the audit procedures deemed necessary to be able to use this data as audit evidence.

This section comprises three subsections that are logically linked, followed by an additional subsection. As the actuarial valuation is performed using the source data in the valuation masterfiles, the first subsection contains a discussion of this data. A major source of the data in the valuation masterfiles is the data in the in-force database, a discussion of which follows in the second subsection. Data is extracted from the in-force database to the valuation masterfiles, and this extraction process is discussed in the third subsection, followed by a subsection on various other source data-related aspects.

6.5.2 Source data contained in the valuation masterfiles

As was indicated in Section 2.6: *Transaction processing and audit trails*, the level of integration between the in-force database and the valuation masterfiles differs amongst insurers. Regardless of the level of integration, the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings should ensure that the auditor obtains sufficient appropriate audit evidence regarding the validity, accuracy and completeness of the data in the valuation masterfiles.

Record counts on the valuation masterfiles and the reconciliation thereof from one financial year to the next provide useful information regarding the validity, accuracy and completeness of masterfile records. An analysis and interpretation of collective responses to Question 97 indicated that the overall audit strategy for testing the validity, accuracy and completeness of the record counts on the valuation masterfiles should comprise one or a combination of the following audit procedures:

- Tests of the relevant controls over the record counts (supported by QR).
- Analytical procedures, including comparison of record counts on the valuation masterfile per product type to the prior year (supported by QR).
- Substantive tests of details: reperforming a reconciliation of the relevant fields in the valuation masterfile to the in-force database (supported by QR).

An important control over the transfer, processing and aggregation of source data in the valuation masterfiles is an input-to-output reconciliation on data contained in the valuation masterfiles (CICA, 1993:para. 33). An analysis and interpretation of collective responses to Question 98 indicated that the overall audit strategy for testing these input-to-output reconciliations should comprise one or a combination of the following:

- Tests of the relevant controls over the reconciliations.
- Analytical procedures, including:
 - comparison of reconciling items to the prior year (also supported by QR);
 - review of the reconciliation of the total number of input and output policies and enquiry about any unexpected variances (also supported by QR).

- Substantive tests of details, including comparison of the relevant fields of a valuation masterfile record to the in-force database and *vice versa* for a sample of policies and/or making use of computer-assisted audit techniques (also supported by QR).

As was mentioned in Section 3.6: *Knowledge of non-accounting statistical data*, the fair presentation of policy liabilities arising under insurance contracts and the related earnings depends on the completeness, validity and accuracy of both accounting data and non-accounting statistical data. Respondents identified the important elements of the latter data type in the above section. An analysis and interpretation of collective responses to Question 99 suggested the following audit strategies, all supported by QR, one or a combination of which should be used to test the accuracy of this data contained in the valuation masterfiles:

- Tests of controls over the accuracy of non-accounting statistical data.
- Detailed substantive procedures, including review and testing of significant reconciling items between this data and audited financial data.
- Analytical procedures, including an analysis of the data in relation to audited financial data.

6.5.3 *Source data contained in the in-force database*

As a significant proportion of the data in the valuation masterfiles is derived from the in-force database, the completeness, validity and accuracy of the data in the in-force database is paramount to both management and the auditor of a long-term insurer.

In response to Question 102, all four respondents indicated that both the following types of audit procedures should be included in the audit strategy to test the validity (i.e. the existence and occurrence assertions) of the data in the in-force database:

- Tests of controls over the validity of data in various relevant transaction cycles (refer to Section 4.6: *Processes relating to source data used in the actuarial valuation* for the identification of these transaction cycles).
- Substantive tests of data from other sources, such as premiums, claims, lapses and surrenders (refer to Section 4.6: *Processes relating to source data used in*

the actuarial valuation for the identification of the transaction cycles in which this data originates).

To expand on the findings above, Table 5-24 contains an analysis of respondents' views regarding the types of transactions related to insurance contracts that should be selected **from the in-force database** and traced **to their source** to test their **validity** as part of tests of controls and/or substantive procedures on the data in the in-force database (Question 103).

Table 5-24: Insurance contract-related data in in-force database to be traced to source

Data	No. of responses
Premium receipts	4 and QR
Premium increases	4 and QR
Claims	4 and QR
Lapses	4 and QR
Surrenders	4 and QR
Raising of automatic policy loans on non-payment of premiums	4 and QR
Policies made automatically fully paid-up on non-payment of premiums	4 and QR
New business (i.e. new insurance contracts entered into)	3 and QR
Premium waivers	3 and QR
No tracing of any data to source deemed necessary	0

Table 5-24 is arranged in order of the level of support by respondents for each type of transaction, measured by the number of respondents who indicated each type of transaction in his/her response, and includes input from QR.

Industry-specific terminology used in Table 5-24 that has not been explained previously in this dissertation, namely “lapses”, “automatic policy loans” and “automatically fully paid-up”, all relate to alternative actions of the insurer upon non-payment by the policyholder of a contractual premium under an insurance contract.

Insurance policies do not immediately lapse upon non-payment of the contractual premium by the policyholder. Depending on the terms of the insurance contract, upon non-payment insurers generally notify the policyholder that payment has not been received and that, as a result, one of the following common actions will be

taken if the situation is not rectified (refer to SAICA, 1998a:Appendix B for definitions of the various terms):

- The policy will lapse (particularly in the case of policies with no surrender value).
- Premiums will automatically be advanced to the policyholder until such time as the amount of the advance (including interest thereon) exceeds the surrender value of the contract (“automatic policy loans”), at which time the policy will lapse.
- The policy is made “fully paid-up”, which entails that premiums are no longer required to be paid by the policyholder, but the insurance contract remains in-force with the benefits under the contract being reduced by the insurer to recover the contractual premiums.

On the basis of the majority view in Table 5-24 it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include the selection of all of the types of data in the table from the in-force database and tracing of the data to its source.

An analysis and interpretation of collective responses to Question 104 indicated that the overall audit strategy for testing that no **duplicate** records exist (i.e. **existence** and **occurrence** assertions) within the in-force database should comprise:

- Tests of the relevant controls, including management’s review of relevant suspense account balances and the clearing thereof (also supported by QR).
- Substantive tests of details, including:
 - The use of computer-assisted audit techniques to identify duplicate records.
 - Review of reconciliations of relevant data fields in the in-force database with the general ledger (e.g. total premiums) and testing of significant reconciling items (also supported by QR).

An analysis and interpretation of collective responses to Question 105 indicated that the overall audit strategy for testing that no **fictitious** records exist (i.e. **existence**

and **occurrence** assertions) within the in-force database should comprise:

- Tests of the relevant controls, including controls to ensure that all the relevant documentation is provided to the insurer by prospective policyholders with all policy applications.
- Substantive tests of details, including the use of computer-assisted audit techniques to identify any anomalies indicative of fictitious records.

With regard to the overall audit strategy for substantively testing the validity and accuracy of the data in the in-force database:

- all respondents and QR indicated that insurance contract details relevant to the actuarial valuation in the in-force database should be agreed with policy contracts and the related documentation on a sample basis (Question 106); and
- in addition, one respondent indicated that, in cases of a high risk of errors in data or ineffective controls in the policy administration process (refer to Chapter 4: *Selected processes affecting policy liabilities and the related earnings*), direct confirmation of the validity and accuracy of insurance contract data relevant to the actuarial valuation in the in-force database should be obtained from policyholders (Questions 107 and 108).

On the basis of these findings it can be concluded that the overall audit strategy for insurance contracts and the related earnings of a listed South African long-term insurer should always include the agreement of insurance contracts details on the in-force database relevant to the actuarial valuation, with policy contracts and related documentation. The extent of such audit procedures depends on the level of detection risk relating to the account balances and assertions affected.

Although the necessity to directly confirm insurance contract data with policyholders under certain circumstances is a minority view, this view is supported by the relevant American audit guidance (AICPA, 2003:para. 6.17). The latter guidance adds another situation in which such direct confirmation should be considered, namely when incentives exist for sales intermediaries to submit fictitious policy applications. On the basis of this international support it can be concluded that, under the circumstances mentioned, consideration should be given to such direct confirmation

in the audit of listed South African long-term insurers. QR concurred with this conclusion.

Whereas the findings in the preceding paragraphs relate mainly to the validity (existence and occurrence assertions) of the data in the in-force database, the following findings relate to the accuracy and completeness of this data.

Table 5-25 contains an analysis of respondents' views regarding the types of transactions related to insurance contracts that should be selected **from their source** and traced **to the in-force database** to test their **accuracy** as part of tests of controls and/or substantive procedures on the data in the in-force database (Question 109).

Table 5-25: Insurance contract-related data to be traced from source to in-force database for accuracy

Data	No. of responses
New business (i.e. new insurance contracts entered into)	4 and QR
Premium receipts	4 and QR
Claims	4 and QR
Lapses	4 and QR
Surrenders	4 and QR
Premium increases	3 and QR
Raising of automatic policy loans on non-payment of premiums	3 and QR
Policies made automatically fully paid-up on non-payment of premiums	3 and QR
Premium waivers	2 and QR
No tracing of any data to source deemed necessary	0

Table 5-25 is arranged in order of the level of support by respondents for each type of transaction, measured by the number of respondents who indicated each type of transactions in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the overall audit strategy for listed South African long-term insurers should definitely include the selection of all types of transactions in Table 5-25 from their source and the tracing thereof to the in-force database for accuracy. Although premium waivers were supported by a smaller majority of respondents than other data in this regard, QR emphasised that premium waivers can have the same impact on policy liabilities as claims. Therefore, as claims received unanimous support from respondents in Table 5-25, premium waivers are rightfully included in the majority view.

Whereas Table 5-25 focuses on the accuracy of data, Table 5-26 contains an analysis of respondents' views regarding the types of transactions related to insurance contracts that should be selected **from their source** and traced **to the in-force database** to test their **completeness** as part of tests of controls and/or substantive procedures on the data in the in-force database (Question 110).

Table 5-26: Insurance contract-related data to be traced from source to in-force database for completeness

Data	No. of responses
New business (i.e. new insurance contracts entered into)	4 and QR
Premium receipts	4 and QR
Claims	4 and QR
Lapses	4 and QR
Surrenders	4 and QR
Premium increases	3 and QR
Raising of automatic policy loans on non-payment of premiums	3 and QR
Policies made automatically fully paid-up on non-payment of premiums	3 and QR
Premium waivers	2 and QR
No tracing of any data to source deemed necessary	0

Table 5-26 is arranged in order of the level of support by respondents for each type of transaction, measured by the number of respondents who indicated each type of transactions in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the overall audit strategy for listed South African long-term insurers should definitely include the selection of all types of transactions in Table 5-25 from their source and the tracing thereof to the in-force database for completeness. Although premium waivers were supported by a smaller majority of respondents than other data in this regard, QR emphasised that premium waivers can have the same impact on policy liabilities as claims. Therefore, as claims received unanimous support from respondents in Table 5-26, premium waivers are rightfully included in the majority view.

In addition to the findings above, respondents indicated that the overall audit strategy should include the following types of audit procedures to test the **completeness** of the in-force database (Question 111) (the number of respondents who indicated each

type of procedure appears in brackets after the type of procedure and includes input from QR):

- Tests of the controls in other related transactions cycles (refer to Section 4.6: *Processes relating to source data used in the actuarial valuation*) (4 and QR).
- Substantive tests of data from independent sources outside the in-force database, including sources such as cash receipts and payments and commission paid (1 and QR).

On the basis of the majority view in the list above it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include tests of controls over the completeness of data in the in-force database in relevant transaction cycles other than the actuarial valuation cycle. Depending on the risk of incomplete data, consideration should also be given to performing substantive tests of data from independent sources such as those in the list above.

A proper cut-off between the financial accounting records and the data used in the actuarial valuation is critical for the completeness and validity of the valuation. An analysis and interpretation of collective responses to Question 112 indicated that the overall audit strategy should include the following audit procedures to test that a proper cut-off was applied between accounting information regarding **premiums** and the in-force database (all supported by QR):

- Tests of the relevant controls (if any).
- Review of a reconciliation between the actuarial build-up of premiums in the valuation masterfiles and premium income in the general ledger.
- Analytical procedures.
- Substantive tests of detail, including testing of a sample of premium receipts before and after year-end.

All respondents also proposed the following audit strategies for testing for a proper cut-off between accounting information regarding **policy benefits** and the in-force database (Question 113):

- Review of claims activity before and after year-end, ensuring that policies are made “out of force” when the claim is recognised in the accounting records (this ensures that is not double-counted in both policy benefits and policy liabilities).
- Review of claims processing backlogs and enquiry about unexpected backlogs.
- Review of claims suspense accounts and their reconciliations to the general ledger and consequent enquiries and substantive testing of reconciling items.
- Review of Claims Incurred But Not Reported balances (where applicable).
- Review of a reconciliation between the actuarial build-up of policy benefits in the valuation masterfiles and policy benefits in the general ledger.

An analysis and interpretation of collective responses to Question 114 indicated that, for fully paid-up policies (refer to the discussions following Table 5-24), the following audit strategies should be employed to test that the sum assured under the insurance contract on the in-force database is validly, completely and accurately reduced as soon as the policy is made fully paid-up:

- Tests of the relevant controls.
- Substantive tests of the proper reduction of the sum assured on a sample of policies.

The nature of participating insurance contracts is discussed in Section 2.7: *Product profiles*, whereas Section 3.5: *Knowledge relating to actuarial assumptions* emphasises the importance of the completeness, validity and accuracy of data in the in-force database relating to bonuses, for actuarial valuation and audit purposes. All four respondents indicated that the overall audit strategy should include tests of the relevant controls to test that bonuses declared in the past have been validly, completely and accurately captured in the in-force database (Question 119).

To test the overall validity, accuracy and completeness of the in-force database, an analysis and interpretation of collective responses to Question 122 indicated that the

overall audit strategy should include the review of the following reconciliations between the in-force database, other application systems and the general ledger:

- Reconciliation of the in-force database to the valuation masterfiles and policy movements (decrements) data (refer to Section 6.3.2: *Underlying data*) (also supported by QR).
- Reconciliation of various relevant items in the in-force database to the general ledger (e.g. policy loans outstanding and outstanding premiums) (also supported by QR).
- Reconciliation between build-ups in the valuation masterfile (refer to Section 2.6: *Transaction processing and audit trails*) to the respective investment portfolios in the investments ledger (also supported by QR).
- Reconciliation of the actuarial ledger to the general ledger. The actuarial ledger contains details of internal transactions required to perform the analysis of surplus (refer to Section 6.3.2: *Underlying data*) and the analysis of the current year's earnings (refer to Section 6.4: *Profit entitlements and earnings*) (also supported by QR).

The consistency of accounting information recorded in the general ledger and data recorded in the in-force database is paramount for the actuarial valuation. Following from the findings in the previous paragraph, an analysis and interpretation of collective responses to Question 123 indicated that the following types of audit procedures on adjustments between accounting information and the data in the in-force database should be included in the overall audit strategy (note that these adjustments should also be included in reconciling items between these two sources of data, discussed in the previous paragraph):

- Tests of the relevant controls over the validity of adjustments (e.g. management approval of adjustments).
- Substantive tests of details, including a review of reconciling items and enquiry about and testing of reconciling items.

6.5.4 *Transfer of data between in-force database and valuation masterfiles*

An analysis and interpretation of collective responses to Question 120 indicated that the overall audit strategy for testing the validity, accuracy and completeness of the

transfer of the data relevant to the actuarial valuation from the in-force database to the valuation masterfiles should include the following types of audit procedures:

- Tests of the relevant controls.
- Substantive tests of details:
 - Computer-assisted audit techniques.
 - Tests of significant reconciling items between the relevant fields in the in-force database and the valuation masterfiles.

The crucial role of information technology systems in a long-term insurer is discussed in Section 4.3: *Information technology processes*. The validity, accuracy and completeness of data and any transfers thereof between the in-force database and the valuation masterfiles are highly dependent on information technology. As was expected on the basis of the importance of this aspect, all respondents indicated that the audit strategy should include a review of information technology system failures, breaches of security and unauthorised access to the in-force database, other interfaced application systems and the valuation masterfiles (Question 121).

Further adjustments to data in the valuation masterfiles may be required once the valuation masterfiles have been created and/or updated from, *inter alia*, the in-force database (for example, the correction of data extraction errors). Such adjustments impact directly on the valuation of policy liabilities and the related earnings, and may result in inconsistencies between accounting data and valuation data causing, for example, overstatement of liabilities due to inclusion of a claim in unpaid policy benefits (creditors) as well as in policy liabilities. An analysis and interpretation of collective responses to Question 124 indicated that the following types of audit procedures should be included in the overall audit strategy to test such subsequent adjustments:

- Tests of the relevant controls over the adjustments.
- Substantive tests on adjustments that may have a significant impact on policy liabilities arising under insurance contracts and the related earnings (depending on the expertise of the auditor, reliance on an actuarial expert may be required to identify these adjustments and perform these tests).

For the reasons discussed above, once the valuation masterfiles have been finalised for use in the actuarial calculations, no further adjustments thereto should be necessary. An analysis and interpretation of collective responses to Question 125 indicated that the overall audit strategy should include the following types of audit procedures to test that no data has been improperly omitted from or added to existing, tested source data in the valuation masterfiles during the actuarial calculation process (the latter process is discussed further in Section 6.6: *Actuarial calculations*):

- Agreement of the data input into the actuarial valuation models with the audited source data. Computer-assisted audit techniques may be useful in performing these tests (also supported by QR).
- Agreement of the relevant control totals of data before and after running the valuation models to perform the actuarial calculations (also supported by QR).

6.5.5 *Various other aspects relating to source data*

Long-term insurers make extensive use of suspense accounts in recording cash receipts and payments relating to industry-specific items such as premiums and claims (SAICA, 1998a:para. 72). These suspense accounts are cleared as each receipt or payment is properly recorded in the in-force database and accounting systems. Items in these suspense accounts existing at the time of the actuarial valuation are at risk of resulting in an improper cut-off between accounting and valuation data (and the resulting risk of double-counting similar to that described in Section 6.5.4: *Transfer of data between in-force database and valuation masterfiles*) and irregularities or errors in clearing them. The overall audit strategy for policy liabilities arising under insurance contracts and the related earnings should therefore facilitate the collection of sufficient appropriate audit evidence in this regard.

Table 5-27 contains an analysis of respondents' views on suspense accounts that potentially have a significant impact on the valuation of policy liabilities arising under insurance contracts (Question 126).

Table 5-27: Significant suspense accounts

Suspense account	No. of responses
Unallocated premiums received	4 and QR
Unallocated claim payments	4 and QR

An analysis and interpretation of collective responses to Question 127 indicated that the audit strategy for suspense accounts containing data that affects the valuation of policy liabilities arising under insurance contracts and/or the related earnings should comprise:

- Tests of controls, including inspection of evidence of management review of the monthly reconciliations of suspense accounts (also supported by QR).
- Analytical procedures, including a review of age analyses of the suspense accounts and enquiries from management about long outstanding entries (also supported by QR).
- Substantive testing of significant entries in the suspense accounts (also supported by QR).

On the basis of the findings in the previous paragraph it can be concluded that one, or a combination of, the types of audit procedures in the previous paragraph should definitely be performed on both suspense accounts in Table 5-29 in all audits of insurance contracts and the related earnings of listed South African long-term insurers.

Although the vast majority of insurance contracts are administered on the main policy administration systems (including the in-force database) of a long-term insurer, a minority of special or new contracts may be administered outside these systems. These contracts may have a material impact on policy liabilities arising under insurance contracts and the related earnings, and in such cases should be included in the overall audit strategy. In response to Question 128, all respondents and QR proposed that the validity, accuracy and completeness of the source data related to such contracts should be tested by agreeing the source data used in the valuation of the policy liabilities arising under such contracts to relevant audited source data and *vice versa*.

Section 6.5: *Source data* contains the findings of the research relating to the nature of audit procedures to test the validity, accuracy and completeness of source data used in the actuarial valuation. The next step in the actuarial valuation process is the calculation of the policy liabilities on the basis of the assumptions and source data. The findings of the research in this regard are discussed in the next section.

6.6 Actuarial calculations

The proper actuarial valuation of policy liabilities arising under insurance contracts and the related earnings is dependent on appropriate actuarial assumptions and proper source data, the overall audit strategy for which is discussed in previous sections. Source data and assumptions are combined in the actuarial calculation process, the overall audit strategy for which is discussed in this section. The execution of overall audit strategies discussed in this section will often involve reliance by the auditor on an actuarial expert. Various strategies relating to such reliance are discussed in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

Section 2.7: *Product profiles* includes a description of the prospective and retrospective valuation methods. It is obvious from the nature of the retrospective valuation method that it is primarily based on underlying investment fund balances built up in the valuation records, instead of on forward-looking actuarial calculations. However, the prospective valuation method is the result of forward-looking actuarial calculations.

A number of recognised computer models that can be used in the prospective valuation process exist in the South African market. Respondents indicated that their selected audit clients currently make use of the models in Table 5-28 (Question 129). No data was available from the fourth respondent.

Table 5-28: Recognised valuation models in use

Suspense account	No. of responses
Prophet	2
Smith Stochastic Model	1
MoSes	1

The selected audit client of one respondent uses two models, explaining the total number of four indications, whereas data was only available from three respondents.

It is clear from Table 5-28 that the selected audit clients of respondents use different valuation models, indicating that a range of valuation models is currently in use in the South African long-term insurance industry. As the purpose of the question was merely to determine whether more than one valuation model is used in the South African industry, a discussion of the differences between the models falls outside the scope of this research.

An analysis and interpretation of collective responses to Question 130 indicated that the overall audit strategy should include the following types of audit procedures to test that the models used for the prospective valuation yield valid, accurate and complete valuation results (no data was available from the fourth respondent):

- Review of significant changes to valuation systems and models during the financial year (also supported by QR). This review can include running the model used in the current financial year on the source data used in the previous financial year and comparing the results to the valuation results of the previous financial year to identify any significant changes to the valuation model.
- Reperformance of model calculations on a sample of policies (also supported by QR). Depending on the expertise of the auditor, the use of an actuarial expert may be required in the performance of these procedures.

The abovementioned suggested procedures assume that either no application controls over these models exist, or that the auditor does not intend to rely on such controls for audit purposes, as this is often the case in practice. However, should the auditor wish to place reliance on such controls, the appropriate tests of these controls should form part of the overall audit strategy.

As was also discussed in Section 4.3: *Information technology processes*, the abovementioned types of audit procedures should be performed on calculations for new product types too, where applicable.

All respondents indicated that the overall audit strategy should include a comparison of material figures in the actuarial valuation brought forward from the previous financial year to the audit working papers and other records of the previous year (Question 131).

When auditing any material accounting estimate (which includes policy liabilities), the auditor should test the calculation procedures employed by management (IAASB, 2005c:para. 19). In response to Question 132, all respondents indicated that the overall audit strategy for policy liabilities and the related earnings should include reperformance of actuarial calculations. This finding corroborates the findings from Question 130 discussed earlier in this section, namely that all relevant respondents proposed that the overall audit strategy for insurance contracts and the related earnings of a listed South African long-term insurer should include reperformance of actuarial calculations on a sample of policies. The extent of this reperformance is a matter of the auditor's professional judgement and depends on factors such as the complexity of the calculations and the risk of material misstatement contained in the result of the calculations.

To enhance the reliability of the actuarial valuation process, the statutory actuary often uses independent checks of the **logic** used in the actuarial calculations (CICA, 1993:para. 35). An analysis and interpretation of collective responses to Question 133 indicated that these checks should be tested as part of the overall audit strategy by reperformance of the actuarial calculations by line of business on a sample basis, and comparison of the results to the calculations performed in the independent check. Depending on the expertise of the auditor, the involvement of an actuarial expert may be required to assist in performing these procedures.

Similarly, the statutory actuary also often makes use of independent checks of the **correctness** of the actuarial calculations themselves (CICA, 1993:para. 35) (as opposed to the logic behind the calculations discussed in the previous paragraph).

An analysis and interpretation of collective responses to Question 134 indicated that these checks should be tested as part of the overall audit strategy in the following ways:

- Review of the results of the client's tests by line of business (also supported by QR).
- Reperformance of the actuarial calculations for a sample of policies and comparison of the results to those of the client's tests (also supported by QR).

Depending on the expertise of the auditor, the involvement of an actuarial expert may be required to assist in performing these procedures.

One respondent indicated that no testing of the independent checks of the actuarial calculations is required, as the required audit assurance can be obtained from reperformance of the actuarial calculations themselves and other audit procedures performed to test the validity, accuracy and completeness of the calculations as discussed in the preceding paragraphs of this section. The combination of different types of audit procedures included in the overall audit strategy to achieve these objectives depends on the professional judgement of the auditor in the particular circumstances of the client.

On the basis of the abovementioned findings it can be concluded that the overall audit strategy for insurance contracts and the related earnings should include audit testing of actuarial calculations by means of, at a minimum, a review of the results of the client's tests of various aspects of the calculations and limited verification of the proper performance of the client's tests. This conclusion is also supported by the existing Canadian audit guidance (CICA, 1993:para. 53) and concurred with by QR.

If the liability value of an insurance contract is not included in policy liabilities, earnings are overstated (i.e. had not occurred) and policy liabilities understated (i.e. not complete). To verify the completeness of policy liabilities and the occurrence assertion as it relates to the related earnings, the overall audit strategy should therefore include testing that all in-force insurance contracts have been included in

the actuarial valuation calculations. This process can be divided into two related steps, namely:

1. testing that all product types have been included in the valuation; and
2. testing that all in-force insurance contracts within each product type have been included in the valuation.

An analysis and interpretation of collective responses to Question 135 indicated that the audit strategy should include the following types of tests with the objective of testing that all product types have been included in the valuation calculations, both supported by QR:

- Review of the retrospective actuarial build-up per product type in the valuation masterfiles (premiums, policy benefits and other relevant fields) and reconciliation thereof to audited information.
- Review of the actuarial report, including the product level profit and loss accounts (also refer to the discussion of the analysis of the current year's earnings in Section 6.4: *Profit entitlements and earnings*).

All respondents and QR also indicated that, to test that all in-force insurance contracts within each product type have been included in the valuation calculations (Question 136), the relevant control totals (e.g. number of policies) should be agreed to the in-force database.

Although advances in data-processing technology are making it increasingly feasible to calculate the actuarial liability for in-force insurance contracts on a contract-by-contract basis (AICPA, 2003:145), some listed South African long-term insurers still group contracts of similar type, issue age and duration into "valuation cells" for valuation calculation purposes. A sample of contracts within each valuation cell is then valued on a contract-by-contract basis and the result scaled up for the entire population of contracts in the particular valuation cell. Properly applied, this method should result in an acceptable proxy for a contract-by-contract valuation. This method, however, increases the inherent risk of incorrect valuation as a result of improper allocation of contracts to cells.

In response to Question 137, one respondent indicated that the audit team has no experience in this regard as the selected audit client values insurance contracts on a contract-by-contract basis. The responses of the other three respondents were interpreted to indicate that, to test the allocation of in-force insurance contracts to the appropriate valuation cells, the overall audit strategy should include a review of a reconciliation of investment fund portfolios underlying the various types of insurance contracts with the retrospective actuarial build-up of the related insurance contracts in the valuation masterfiles. On the assumption that the cash flows related to each insurance contract are invested in the appropriate investment portfolio, this reconciliation proves that the appropriate insurance contracts have been related to the particular investment portfolio and, by implication, that insurance contracts have been allocated to the appropriate valuation cells. Depending on the expertise of the auditor, the assistance of an actuarial expert may be required to perform this review.

The introduction of new product lines (in other words, new types of insurance contracts) increases the inherent risk of errors in their valuation, as calculation methods for these products may be inappropriate or inconsistent with those used for existing products with similar characteristics. ISA 545: *Auditing fair value measurements and disclosures* (IAASB, 2005d:para. 24 and 27) requires the auditor to evaluate the appropriateness and consistency of the method of fair value measurement. An analysis and interpretation of collective responses to Questions 138 and 139 suggested the following types of audit procedures, both also supported by QR, to test actuarial calculation methods for new products for appropriateness and consistency with existing similar products:

- Evaluation by an actuarial expert of consistency of calculation methods with similar existing products, taking into account specifications of new products.
- Reperformance of calculations for a sample of policies of new product types, including an assessment of consistency with calculation methods for similar existing products.

Section 2.8: *Monitoring of actuarial assumptions* explains why a seemingly insignificant change in assumptions can have a significant impact on the actuarial valuation result. In response to Question 140, three of the four respondents indicated that, to test that changes in assumptions have been validly, accurately and

completely incorporated into the valuation calculations, the overall audit strategy should include substantive testing of the inputs of assumptions into the actuarial valuation models. Depending on the expertise of the auditor, the involvement of an actuarial expert may be required to perform these tests. QR concurred with this view.

The compound (risk and investment) nature of universal life insurance contracts is described in Section 2.7: *Product profiles*. The premiums received and policy benefits paid from these contracts are allocated between the risk element of the contract and the investment element of the contract. Whereas risk premiums and benefits have a direct impact on earnings from long-term insurance business, investment premiums and benefits do not.

Table 5-29 summarises the proposals of respondents regarding the types of audit procedures to be included in the overall audit strategy to test the allocation and recording of premiums between risk premiums and investment premiums (Question 142) (no data was available from the fourth respondent):

Table 5-29: Types of audit procedures to test allocation of premiums

Type of audit procedure	No. of responses
Tests of controls over underwriting (including information system controls over allocation of premiums in accordance with policy design, which might be part of the policy administration process in some insurers) (refer to Chapter 4, Table 4-3 for a description of the objectives of various business processes)	3 and QR
Substantive testing of allocation and recording of premiums for specific high-value policies	1 and QR
Substantive testing: agreement of investment premium to increase in account balance	1 and QR

Table 5-29 is arranged in order of the level of support by respondents for each type of audit procedure, measured by the number of respondents who indicated each type of audit procedure in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the overall audit strategy for insurance contracts and related earnings of listed South African long-term insurers should definitely include tests of the relevant controls to ensure that premiums on universal life insurance contracts are correctly allocated and recorded between risk premiums and investment premiums. Although only supported by a minority of respondents, substantive testing as indicated in Table 5-29 should also be considered in specific

circumstances, including insurers where the relevant controls are not effective and insurers that have a number of specific high-value in-force policies of this nature.

Table 5-30 summarises the proposals of respondents regarding the types of audit procedures to be included in the overall audit strategy to test the allocation and recording of policy benefits between risk benefits and investment benefits (Question 143):

Table 5-30: Types of audit procedures to test allocation of policy benefits

Type of audit procedure	No. of responses
Tests of controls over the claims process (testing that company policy has been complied with)	4 and QR
Substantive testing of allocation and recording of policy benefits for specific high-value policies	2 and QR

Table 5-30 is arranged in order of the level of support by respondents for each type of audit procedure, measured by the number of respondents who indicated each type of audit procedure in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the overall audit strategy for listed South African long-term insurers should definitely include tests of the relevant controls over the claims process to ensure that policy benefits on universal life insurance contracts are correctly allocated and recorded between risk benefits and investment benefits. Relevant substantive tests as indicated in Table 5-30 should also definitely be performed in cases where the relevant controls are not effective and where a number of specific high-value in-force policies of this nature exist.

Also of importance for the proper valuation of universal life insurance contracts is the proper application of investment-related cash flows (including investment premiums, bonus declarations, interest on balances and expense charges) to individual insurance contract account balances. All four respondents and QR proposed that the overall audit strategy should include tests of the relevant controls to test this aspect (Question 146). A key control in this regard is the reconciliation of the number of units multiplied by the unit value with the value of the underlying investment portfolio as discussed in the following paragraphs.

The investment portions of universal life insurance contracts and certain unitised with-profit insurance contracts are often administered on a “unit-linked” basis (ASSA, 2004:para. 4.9). This basis entails that the investment portion of each policy is “invested” in a number of units in a pooled portfolio of investment assets ring fenced for the particular type of policy. The proper creation (upon cash inflows into the portfolio) and cancellation (upon cash outflows from the portfolio) of units to maintain unit prices for current unit-holding policies is vital for the actuarial valuation process, as unit values drive the valuation of these policies. Table 5-31 contains a summary of respondents’ proposals for the types of audit procedures to be included in the overall audit strategy to test the proper creation and cancellation of units (Questions 144 and 145).

Table 5-31: Audit procedures to test creation and cancellation of units

Type of audit procedure	No. of responses	
	Creation	Cancellation
Tests of controls over the creation and cancellation of units (including allocation of units to product portfolios)	4 and QR	4 and QR
Substantive testing: review and testing of significant reconciling items in a reconciliation between total value of units (number of units x unit price) and the related investment assets	2 and QR	1 and QR

Table 5-31 is arranged in order of the level of support by respondents for each type of audit procedure, measured by the number of respondents who indicated each type of audit procedure in his/her response, and includes input from QR. On the basis of these findings it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely at least include tests of the controls over the creation and cancellation of units. Depending on the related risk of material misstatement, substantive testing of these areas as described in Table 5-31 should also be afforded consideration. The smaller support for substantive testing in this regard can be explained by differences in the experiences of respondents in respect of the risk of material misstatement in this regard.

The retrospective valuation method was described earlier in this section as being based on a historical “build-up” of investment funds underlying the policy liability. The build-up of the investment funds is briefly described in Section 2.6: *Transaction*

processing and audit trails. It is administered as part of the valuation data and consists of premiums, investment returns, expense charges (e.g. management fees and taxation) and policy benefits related to the particular portfolios. Respondents were asked to provide a high-level description of the types of audit procedures that should be performed to test the accuracy of each of the abovementioned elements in the build-up of the investment funds (Questions 147 to 150). All respondents proposed that tests of the relevant controls should be performed, including inspection of evidence of the proper performance of a reconciliation between each of the elements in the actuarial build-up and the general ledger.

Section 6.6: *Actuarial calculations* contains a discussion of the findings of the research relating to the actuarial calculations of policy liabilities arising under insurance contracts. The findings relating to the next steps in the valuation process, namely the validation and financial reporting of the result of the actuarial calculations, are discussed in the next section.

6.7 Validation and financial reporting of valuation result

Once the actuarial valuation process for each product type has been completed, the valuation results per product type are aggregated and the results of the valuation process should be considered by management for reasonability, including factors such as completeness and consistency with prior years. In this research, this process is referred to as “validation of the valuation result”. This process should be followed by the recording of the valuation result in the accounting records of the insurer (financial reporting of the valuation result). The overall audit strategy for insurance contracts and the related earnings should include an assessment of the validity of the valuation result and the validity, accuracy and completeness of the financial reporting thereof.

Table 5-32 contains a summary of audit procedures proposed by respondents to test the reasonableness and validity of the actuarial calculations (Question 151).

Table 5-32: Types of audit procedures for reasonableness and validity of actuarial calculations

Type of audit procedure	No. of responses
Review of sensitivity analyses of valuation results to changes in assumptions, done by actuarial department for corroborative audit evidence (also refer to Section 6.3.3: <i>Derivation of assumptions</i>)	3 and QR
Review of analysis of surplus	3 and QR
Analytical procedures, including a review of the result of the calculations compared to those of the previous year, taking into account the impact of changes in data	1 and QR

Table 5-32 is arranged in order of the level of support by respondents for each type of audit procedure, measured by the number of respondents who indicated each type of audit procedure in his/her response, and includes input from QR.

The analysis of surplus referred to in Table 5-32 is an analysis performed by the actuarial department to explain the total movement in the net surplus of assets over liabilities from one financial year to the next and was explained in more detail in Section 6.3.2: *Underlying data*.

It can be concluded that:

- on the basis of the majority view, the overall audit strategy for listed South African long-term insurers should definitely include a review of the sensitivity analyses in Table 5-32 and the analysis of surplus to test the reasonableness and validity of the actuarial calculations; and
- although only supported by a minority of respondents, analytical procedures as described in Table 5-32 should be afforded consideration by the auditor in this regard in specific circumstances. The smaller support for analytical procedures can be ascribed to doubt about whether analytical procedures of this nature are sufficiently sensitive to detect material misstatements.

Table 5-33 summarises responses regarding potentially unusual occurrences for which the auditor should review the valuation results and about which (s)he should enquire from management as part of overall analytical procedures (Question 152). These occurrences might be indicative of material misstatements in policy liabilities arising under insurance contracts and the related earnings.

Table 5-33: Unusual occurrences for which valuation results should be reviewed

Abnormality	No. of responses
Insurance contracts with negative (i.e. debit) policy liability balances	1
Insurance contracts with zero policy liability balances	1
Contracts of which the policy liability does not equal the sum assured per the insurance contract	1

Only one respondent indicated each of the occurrences in Table 5-33 in his/her response. The other three respondents indicated that the audit assurance obtained from audit procedures performed on the analysis of surplus should identify all material unusual occurrences. Consequently, no further audit procedures should be required to identify such occurrences. This audit strategy is appropriate, provided that the other audit procedures performed on the analysis of surplus (including the source data used to prepare the analysis) is sufficiently extensive to address the relevant risk of material misstatement.

On this basis it can therefore be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include sufficiently extensive audit procedures to identify unusual occurrences in the valuation result. These procedures can be performed as part of a detailed review and testing of the analysis of surplus, or by means of a review of the valuation results for all the unusual occurrences in Table 5-33. This conclusion was supported by QR.

Participating insurance contracts are described in Section 2.7: *Product profiles*. A particular type of participating insurance contract that allows the policyholder to share in investment surpluses in an indirect manner is termed “smoothed bonus business” (refer to ASSA, 2001b:para. 2.13). Bonuses are declared to holders of these policies on a smoothed basis, taking into account actual past and expected future investment performance in the portfolio. No direct relationship therefore exists between bonus declarations and historical investment surpluses. Although pure investment contracts of this nature are excluded from the scope of this research (they are not insurance contracts as defined), the investment portion of some universal life insurance contracts may be invested in such portfolios, which requires their consideration in the research.

An overdistribution to policyholders of actual investment surpluses in such a portfolio results in a debit (negative) balance for the policy liability based thereon. This debit balance is termed a “negative bonus stabilisation reserve”. In the South African environment, it is currently acceptable for such debit balances to exist and to be used to reduce total policy liabilities to the extent that the debit balance is expected to be recovered within the ensuing three years by means of under-distribution of actual future investment surpluses arising during these years (ASSA, 2001b:para. 2.13). Due to the subjective nature of these balances and their effect of potentially materially understating policy liabilities and overstating the related earnings, negative bonus stabilisation reserves are exposed to a high level of inherent risk and therefore require careful consideration as part of the overall audit strategy.

Table 5-34 contains an analysis of respondents’ views regarding which aspects of negative bonus stabilisation reserves should be evaluated by the auditor as part of the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings (Question 153) and includes input from QR.

Table 5-34: Audit focus areas relating to negative bonus stabilisation reserves

Focus area	No. of responses
Potential for reversal of negative (debit) balances within three years	4 and QR
Reasons for consistently negative (debit) reserve balances	4 and QR
Disclosure if debit balance is in excess of 7.5% of the related policy liabilities (ASSA, 2002:para. 4.11)	4 and QR
Appropriateness of future bonus assumptions compared to actual investment returns	4 and QR

It can be concluded from Table 5-34 that, in respect of negative bonus stabilisation reserves, the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include a sufficient focus on all the areas in Table 5-34.

The retrospective and prospective valuation methods, as well as the second-tier margin that might arise where a retrospective valuation method is used, are described in Section 2.7: *Product profiles*, and descriptions are hence not repeated here. Two respondents indicated that the overall audit strategy should always include a comparison of the results of any retrospective valuations with those of the

prospective valuations of the same products to identify and verify any second-tier margins arising from an excess of the retrospective valuation result over the prospective valuation result (Question 154). Another respondent indicated that such review is only required for types of insurance contracts for which a real risk exists that the prospective valuation might exceed the retrospective valuation. No data was available from the fourth respondent.

As the objective of the comparison is to identify any second-tier margins (excesses of retrospective valuations over prospective valuations as opposed to *vice versa*), the author supports the majority view (two out of three), from which it can be concluded that such review should definitely be included in the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers where a significant risk of material misstatement in this regard exists. QR supported this view.

All respondents and QR indicated that, as part of overall analytical procedures, the results of the actuarial calculation of the current financial year should be compared to those of prior financial years and any unexpected variations should be investigated (Question 155). An analysis and interpretation of collective responses to Question 156 indicated that “unexpected variations” in this regard include:

- Unexpected changes to valuation models (also supported by QR).
- Unexpected changes to valuation bases (also supported by QR).
- Non-occurrence of changes in the valuation result expected on the basis of known changes in factors affecting the valuation result (including indications from the analysis of surplus that a reserve change should have occurred) (also supported by QR).

Total policy liabilities of a long-term insurer typically comprise the following classes of liabilities:

- Liabilities in respect of specific in-force insurance contracts and investment contracts (product-related reserves); and

- Liabilities indirectly related to existing in-force business, but not related to any individual policy, including reserves for data errors or mismatching and, in some cases, AIDS reserves (non-product-related reserves).

Whereas the focus of this research is on product-related reserves, respondents were asked to provide a brief description of procedures that the auditor should use to evaluate the appropriateness of any non-product-related reserves (Question 157). Responses yielded the following suggested procedures in this regard, both supported by QR:

- Compliance with the relevant Professional Guidance Notes issued by the ASSA (e.g. PGN 105: *AIDS extra mortality bases* in respect of any specific AIDS reserves).
- Substantive testing where appropriate (depending on the nature of the source data on which the reserve is based).

Depending on the expertise of the auditor, the involvement of an actuarial expert may be required to evaluate the sufficiency and appropriateness of the abovementioned types of reserves.

As was mentioned earlier in this section, the final step in the actuarial valuation process is the aggregation of the valuation results per product type to determine the balance of total policy liabilities. An analysis and interpretation of collective responses to Question 158 suggested that the following types of audit procedures should be included in the overall audit strategy to test the completeness of the aggregation of the various actuarial calculations:

- Review of the build-up in the actuarial records and source systems for completeness (also supported by QR).
- Review and substantive testing of significant reconciling items in a reconciliation between the actuarial valuation result and the relevant financial accounting records (also supported by QR).

Depending on the expertise of the auditor, an actuarial expert may be required to assist in the performance of the abovementioned types of procedures.

Once the actuarial calculations have been completed and aggregated, the valuation result is usually entered into the accounting records of the insurer by means of journal entries. The sheer magnitude of these journal entries and their consequential material impact on the balance sheet and earnings increase the inherent risk of fraud and error relating to these entries (refer to AICPA, 2003:92). Table 5-35 contains an analysis of respondents' proposals regarding the types of audit procedures that should be used to test the validity, accuracy and completeness of these journal entries (Question 159).

Table 5-35: Types of audit procedures relating to journal entries

Type of audit procedure	No. of responses
Agreement of journal entries to results of actuarial calculations	4 and QR
Review of reconciling items between actuarial calculations and journal entries	4 and QR
Review of management approval of journal entries	3 and QR

Table 5-35 is arranged in order of the level of support by respondents for each type of procedure, measured by the number of respondents who indicated each type of procedure in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include all of the types of audit procedures in Table 5-35.

This concludes the discussion of the findings in respect of the overall audit strategy relating to each of the specific steps in the actuarial valuation process as listed in the introduction to Section 6: *Findings relating to the nature of audit procedures*. The next section contains a discussion of the research findings relating to the use of analytical procedures as an element of the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings.

6.8 Analytical procedures

Analytical procedures are defined as comprising a “study of plausible relationships among ... data” and “the investigation of identified fluctuations and relationships that

are inconsistent with other relevant information, or deviate significantly from predicted amounts” (IAASB, 2004a).

The complex and judgemental nature of policy liabilities arising under insurance contracts and the related earnings, as well as the diverse and extensive range of factors impacting thereon, renders the performance of effective and efficient analytical procedures on these items difficult. Management of the insurer may, however, monitor certain key performance indicators relating to these items in managing the business, and these may be capable of being used in analytical procedures performed by the auditor (refer to SAICA, 1998a:para. .61), provided that the indicators are reliable. The implementation guidance issued as part of IFRS 4 (IASB, 2004b:para. IG71) indicates that disclosure of these key performance indicators is voluntary, resulting in the necessary information not necessarily being readily available to the auditor.

An analysis and interpretation of collective responses to Question 186 suggested that the overall audit strategy should include a review of the following key performance indicators monitored by management of the insurer:

- Trends in embedded value (refer to Chapter 1, Section 2.2.2: *Preliminary identification of potential high-risk “industry-specific” elements in the financial statements of South African long-term insurers*) (also supported by QR).
- Embedded value of new business (also supported by QR).
- New business embedded value margins (also supported by QR).
- Operating profit by line of business (also supported by QR).
- Annual premium equivalent (this indicator is generic within the industry and comprises new recurring premiums (excluding premiums from index growth) plus 10% of single premiums (Sanlam, 2003:7)) (also supported by QR).
- Number of in-force policies (also supported by QR).
- Constituent elements of the analysis of surplus (refer to Section 6.3.2: *Underlying data* for a description of the analysis of surplus) (also supported by QR).
- Net cash flows (also supported by QR).
- Retention rate (the percentage of new business retained after taking into account lapses and surrenders).

- Risk margins (refer to Section 6.4: *Profit entitlements and earnings* for a description of risk profits and losses).

Market and industry information is often useful as benchmarks to which the performance of a particular company can be compared. This information is, however, not always readily available in all industries. An analysis and interpretation of collective responses to Question 188 indicated that the following market and industry information should be used by the auditor in performing analytical procedures relating to policy liabilities and the related earnings of a listed South African long-term insurer:

- Various industry statistics prepared by the Life Office Association (e.g. lapse rates).
- Available competitor information (including annual reports and information available from the Financial Services Board extracted from regulatory returns).
- Reports by investment analysts.
- Information relating to financial and investment markets, including interest rates and securities markets levels.

Two respondents indicated that industry information about the South African long-term insurance industry that is useful for audit purposes is generally readily available to auditors, whereas the other two respondents indicated that this is not the case (Question 189).

In follow-up interviews, the latter two respondents indicated that, although general market and industry information is relatively readily available, competitor-specific information that would have been more useful for audit purposes than general industry information is not readily available. This issue is, however, pervasive to most industries in South Africa.

On this basis it can be concluded that some general market and industry information useful for audit purposes is generally readily available to the auditors of listed South African long-term insurers.

On the basis of the findings above it can also be concluded that, although complex, a certain extent of analytical procedures at the level of policy liabilities and the related earnings in total and at the level of individual product lines is useful in the audit of listed South African long-term insurers. QR supported this conclusion. It should be borne in mind that further analytical procedures that can be performed in specific areas are discussed in other sections of this chapter.

6.9 Miscellaneous other aspects relating to the nature of audit procedures

This section contains an analysis and discussion of the findings of the research relating to the nature of audit procedures for policy liabilities arising under insurance contracts and the related earnings not yet addressed in any of the previous subsections of Section 6: *Findings relating to the nature of audit procedures*.

6.9.1 Management representations

ISA 545: *Auditing fair value measurements and disclosures* (IAASB, 2005d:para. 63) requires the auditor to obtain a written representation from management regarding the appropriateness of assumptions significant to fair value measurements. In the case of a long-term insurer, these representations can be obtained from either general management of the insurer or the statutory actuary or from both these parties.

An analysis and interpretation of collective responses to Question 190 yielded the following examples of representations relating to policy liabilities arising under insurance contracts and the related earnings that should be obtained from general management (no data was available from the fourth respondent):

- Agreement of management with actuarial assumptions (also supported by QR).
- Agreement of management with second-tier margins (also supported by QR).
- Agreement of management with any changes to actuarial valuation bases (also supported by QR).
- Agreement of management with the profit entitlement policies applied.
- Confirmation of the completeness of the actuarial valuation.

- Confirmation by management that the work of the statutory actuary has been performed in accordance with generally accepted actuarial principles and the relevant Professional Guidance Notes issued by the ASSA (also supported by QR).

As is discussed in Chapter 6, Section 5.3.3.5: *Communication between the auditor and the statutory actuary*, no respondents indicated that any representations in addition to those in the abovementioned list are required specifically from the statutory actuary of the insurer. The author concurs with this view.

6.9.2 *Deferred acquisition costs*

Acquisition costs comprise expenses incurred during the process of acquiring and issuing an insurance contract and include commission and an allocation of various other expenses. Due to a lack of authoritative accounting and financial reporting guidance in respect of this area, as described in Chapter 1, Section 2.3.1: *Lack of South African financial reporting guidance*, South African long-term insurers currently employ a number of different accounting treatments for acquisition costs. IFRS 4 (IASB, 2004b) also does not address this issue, although it is expected to be addressed in the final phase of the IASB's insurance accounting project (refer to Chapter 1, Section 2.2.1: *Background* for more detailed information regarding this project).

The differences in accounting treatments of acquisition costs by the selected long-term insurance clients of respondents are evident from Table 5-36, which analyses responses to Question 2 of the questionnaire. No data was available from the fourth respondent.

Table 5-36: Accounting treatment of acquisition costs

Accounting treatment	No. of responses
Expensed in year of inception and not explicitly recovered from policyholder	0
Expensed in year of inception but partially recovered from policyholder over policy term in the form of fees for which an “unrecouped expense account” debit balance is created and offset against the related policy liability	1
Deferred, recognised as an asset or negative liability (debit balance) and amortised	2
TOTAL	3

Whereas the information in Table 5-36 focuses on the accounting treatment of acquisition costs, the remainder of this section focuses on various auditing aspects thereof.

Respondents indicated that the overall audit strategy should include the following types of audit procedures to test the **accuracy** of debit balances relating to deferred acquisition costs or unrecouped acquisition expenses (Question 192):

- Tests of the relevant controls.
- Analytical procedures.

Depending on the expertise of the auditor, the assistance of an actuarial expert may be required in the performance of these types of procedures.

An analysis and interpretation of collective responses to Question 191 indicated that the overall audit strategy should include the following types of audit procedures to test the **recoverability** (i.e. the valuation assertion) of debit balances relating to deferred acquisition costs or unrecouped acquisition expenses:

- Analytical procedures:
 - review of lapse and surrender reserves (where these exist);
 - review of mortality and morbidity experience; and
 - comparison of debit balances to the embedded value of in-force business for the relevant products. The embedded value of in-force business for the relevant products in a prospective valuation is driven largely by expected future fees to be recovered from the products, which should be sufficient to recover any debit balances. A consistent or decreasing ratio of debit balances to the embedded value of in-force business is therefore indicative

of a consistent or increased probability of recovery of the debit balances respectively.

- Inspection of resetting of any negative policy liabilities to zero. This situation refers to the second line in Table 5-36 in cases where the unrecouped expense account debit balance exceeds the related policy liability credit balance.

Depending on the expertise of the auditor, the assistance of an actuarial expert may be required in the performance of these types of procedures.

6.9.3 *Non-profitable insurance contracts*

IFRS 4 (IASB, 2004b:para. 15) requires management of an insurer to perform a “liability adequacy test” on the basis of expected future cash flows from insurance contracts in-force at each balance sheet date. Should the test indicate that a particular portfolio of insurance contracts is not profitable (i.e. generates a negative net present value of expected future cash flows), the entire loss should be recognised immediately in earnings, with a corresponding credit entry increasing policy liabilities. All respondents except one, from whom no data was available, indicated that their clients implicitly or explicitly perform liability adequacy tests as required by IFRS 4 (IASB, 2004b) (Question 194).

An analysis and interpretation of collective responses to Question 195 also indicated that the auditor should test that the liability adequacy test has been consistently and properly applied by including the following types of procedures in the overall audit strategy (no data was available from the fourth respondent):

- Review of the adequacy of lapse and surrender reserves (where these exist) (also supported by QR).
- Review of compliance with the requirements of the Financial Soundness valuation method set out in PGN 104 (ASSA, 2001b) (also supported by QR). The Financial Soundness method inherently incorporates a loss recognition test as envisaged by IFRS 4 (IASB, 2004b), as it requires the projection of individual types of future cash inflows and outflows, followed by the discounting thereof to the present value of net cash flows. The latter number could be positive, indicating a profitable contract, or negative, indicating a non-profitable contract.

Depending on the expertise of the auditor, the assistance of an actuarial expert may be required in the performance of these types of procedures.

6.9.4 *Reinsurance*

The nature, types and other aspects of reinsurance are discussed in Section 2.9: *Reinsurance* that should be read in conjunction with this section for contextualisation.

Although the analysis of responses in Section 2.9: *Reinsurance* indicated that the extent of both ceded and accepted reinsurance activities of the selected audit clients of respondents is not significant, respondents were asked to assume that the extent of reinsurance activities is significant in answering Questions 196 to 199, all relating to reinsurance, to enhance the completeness of this research in relation to its stated objective.

Section 4.4: *Reinsurance processes* contains the findings of the research relating to the types of internal controls-related audit procedures to be included in the overall audit strategy in respect of reinsurance. This section consequently contains an analysis and discussion of the responses regarding substantive testing of reinsurance-related aspects.

An analysis and interpretation of collective responses to Question 196 indicated that the following aspects of significant reinsurance arrangements or changes therein should be reviewed as part of the overall audit strategy:

- Compliance with the terms and conditions of reinsurance contracts insofar as compliance affects the financial statements (also supported by QR).
- Completeness of reinsurance arrangements (i.e. compliance with the reinsurance policy of the company indicating the types of business to be reinsured).

All respondents and QR indicated that the overall audit strategy should include a review of significant ceded and accepted reinsurance contracts of the insurer in order to understand and evaluate the rights and obligations arising from them and their

impact on the financial statements (Question 197). In this regard, QR pointed out that the substance of the reinsurance contract that may differ from its legal form is of particular importance. Reinsurance contracts that do not transfer insurance risk should not be regarded as insurance contracts for financial reporting purposes.

If reinsurers to which risks have been ceded by an insurer (reinsurance cessionaries) are financially unable to pay out reinsurance claims intimated by the insurer, the related reinsurance asset (which may have been set off against the related policy liabilities as discussed in Section 2.9: *Reinsurance*) is impaired and should be measured accordingly (refer to CICA, 1993:para. 58). An analysis and interpretation of collective responses to Question 198 indicated that the financial strength of reinsurance cessionaries should be evaluated by including one or a combination of the following types of audit procedures in the overall audit strategy:

- Inspection of approval of reinsurers by the board of directors on the basis of their credit ratings and information about them in the markets and financial press.
- Review of the financial statements of reinsurers to evaluate credit risk.

The correctness of data relating to premiums, claims and other matters sent to and received from reinsurers is vital for the accuracy of the measurement of reinsurance assets and liabilities and also for the proper measurement of the related earnings. Three respondents accordingly indicated that data sent to and received from reinsurers by the audit client should be reviewed for correctness as part of the overall audit strategy (Question 199), whereas the other respondent indicated that (s)he did not have an opinion in this regard.

On the basis of the majority view it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include a review of data sent to and received from reinsurers for correctness, should the extent of reinsurance activities be significant. This conclusion was supported by QR.

6.9.5 *Investment return guarantees*

Certain types of insurance contracts (including some universal life insurance contracts) contain a guarantee of a minimum return on the underlying investments. Should the underlying investments not provide a return at least equal to the guarantee, the shortage is (at least partially) financed from shareholders' funds, resulting in a reduction in earnings.

PGN 110: *Reserving for minimum investment return guarantees* (ASSA, 2003) (PGN 110) issued by the ASSA contains specific requirements relating to the application of the Financial Soundness method to value policy liabilities of this nature. All respondents and QR accordingly indicated that the overall audit strategy should include audit procedures to test whether the insurer has complied with the requirements of PGN 110 (ASSA, 2003) (Question 203).

6.9.6 *Disclosure-related aspects*

Chapter 1, Section 2.2.1: *Background* contains a discussion of the extant financial reporting guidance applicable to listed South African long-term insurers. This guidance also contains requirements relating to matters that should be disclosed in the annual financial statements of the insurer. The overall audit strategy followed by the auditor of a long-term insurer should facilitate the collection of sufficient appropriate audit evidence to support the "presentation and disclosure" assertions as they relate to policy liabilities arising under insurance contracts and the related earnings. ISA 545: *Auditing fair value measurements and disclosures* (IAASB, 2005d:para. 56) (ISA 545) also specifically requires the auditor to evaluate disclosures about fair values of assets and liabilities.

As could therefore be expected, all respondents and QR indicated that the overall audit strategy should include audit procedures to evaluate whether disclosures about the values of insurance contracts are in accordance with the relevant financial reporting framework (Question 205).

For financial statement components that contain a high degree of measurement uncertainty (such as policy liabilities), ISA 545 (IAASB, 2005d:para. 59) requires the auditor to evaluate the adequacy of disclosures to inform users of the uncertainty. Again, as could be expected, all respondents indicated that the overall audit strategy should include audit procedures to evaluate the adequacy of such disclosures as they relate to policy liabilities arising under insurance contracts (Question 206).

Respondents also indicated that, in order to identify matters relating to policy liabilities arising under insurance contracts and the related earnings that may be of audit significance and may need to be disclosed, correspondence between the insurer and a number of parties external to the insurer should be reviewed (Question 208). These responses have been summarised in Table 5-37 and include input from QR.

Table 5-37: Client correspondence to be reviewed by the auditor

External party	No. of responses
Registrar of Long-Term Insurers	4 and QR
South African Revenue Services	4 and QR
Ombudsman responsible for long-term insurance matters	4 and QR

On the basis of the majority view it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely include a review of all the types of correspondence in Table 5-37 to identify matters of audit significance.

6.10 Conclusion

This section contained a discussion of the findings of the research relating to the **nature** of audit procedures to be covered by the overall audit strategy for policy liabilities arising from insurance contracts and the related earnings. The structure and contents of the section creates an important part of the framework for the formulation of overall audit strategies for insurance contracts and the related earnings developed in this research.

Although it is not sensible to attempt to summarise the entire part of the framework created in this section, the principle areas covered are:

- Actuarial valuation methods.
- Valuation assumptions.
- Profit entitlements and earnings.
- Source data.
- Actuarial valuation calculations.
- Validation and financial reporting of the valuation result.
- Analytical procedures.
- Management representations.
- Deferred acquisition costs.
- Non-profitable insurance contracts.
- Reinsurance.
- Investment return guarantees.
- Disclosure.

Findings relating to the **timing** of audit procedures are discussed in the next section.

7. FINDINGS RELATING TO THE TIMING OF AUDIT PROCEDURES

7.1 Introduction

The timing of audit procedures refers to “when audit procedures are performed” (IAASB, 2005j:para. 14). Substantive tests as well as tests of controls can be performed prior to the financial year-end of the client, but should this be the case, additional audit assurance is required for the remaining period (IAASB, 2005j:para. 15). The timing of tests of controls is affected by factors such as the quality of the overall control environment and the availability of information evidencing the performance of the control (IAASB, 2005j:para. 16). The timing of substantive procedures is affected by various factors (refer to IAASB, 2005j:para. 57), many of which are directly or indirectly related to the assessment of the risk of material misstatement related to the account and assertion being addressed by the procedures. As the risk of material misstatement increases,

substantive procedures should be performed closer to the year-end of the client (IAASB, 2005j:para. 15).

7.2 Research findings

Table 5-38 contains an analysis of responses in respect of the types of audit procedures relating to insurance contracts and the related earnings that can be performed prior to the client’s financial year-end (Question 209). For each type of procedure, respondents also indicated how many months prior to the client’s financial year-end the audit procedures can be performed. The table includes input from QR.

Table 5-38: Timing of audit procedures performed prior to year-end

Nature of audit procedure	No. of months prior to year-end	No. of responses
Tests of controls	3	4 and QR
Review of in-force policies to identify minimum investment return guarantees that require a specific audit focus	3	2 and QR
Review of classification of in-force policies between insurance contracts and investment contracts	3	1 and QR
Review of actuarial valuation models	1	1
Review of basis of actuarial assumptions and experience analyses	1	1

In interpreting Table 5-38 it should be borne in mind that respondents’ views on the approximate timing of audit procedures may well have been influenced by their experiences (including factors such as quality of the overall control environment and assessment of risks of material misstatement) relevant to the audit of their selected audit clients, which will result in differing views in this regard. The results do, however, provide a clear indication of the nature of the audit procedures that should be considered for performance prior to year-end, taking due cognisance of the particular client circumstances.

Whereas certain audit procedures can be performed prior to the financial year-end of the client, other audit procedures should be performed subsequent to such date. ISA 560: *Subsequent events* (IAASB, 2005i:para. 02) requires the auditor to consider the effect of certain events subsequent to the financial year-end of the client (subsequent events) on both the financial statements and the audit report.

Table 5-39 contains an analysis of responses relating to the items relevant to policy liabilities arising under insurance contracts and the related earnings that the auditor should include in the review of subsequent events (Question 210).

Table 5-39: Items to be included in subsequent events review

Event	No. of responses
Changes in economic indicators (e.g. interest rates, inflation, taxation matters) after year-end	4 and QR
Factors affecting mortality and morbidity assumptions after year-end	4 and QR
Information relating to claims experience after year-end	4
Significant changes in the market value of investments to assess the impact thereof on the appropriateness and recoverability of negative bonus stabilisation reserves (refer to Table 5-34)	1

Table 5-39 is arranged in order of the level of support by respondents for each item, measured by the number of respondents who indicated each item in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, the overall audit strategy for listed South African long-term insurers should definitely include a review of subsequent events covering the first three items in Table 5-39; and
- although only supported by a minority of respondents, the last item in the abovementioned table should be afforded consideration by the auditor in this regard in specific circumstances. The reasons for the smaller support for this item include the fact that, as an insurer has a period of three years over which to recover negative bonus stabilisation reserves, a temporary reduction in market values of investments after year-end would rarely indicate non-recoverability over the ensuing three-year period.

The factors indicated in Table 5-39 for inclusion in the subsequent events review of the auditor were also analysed in conjunction with the responses relating to the identification of actuarial assumptions critical to the valuation of insurance contracts discussed in Section 3.5: *Knowledge relating to actuarial assumptions*. The items indicated for inclusion in the subsequent events review potentially have a direct or indirect impact on the auditor's assessment of the appropriateness of the actuarial assumptions. A review of these items subsequent to year-end therefore provides

additional audit evidence to corroborate that obtained from the types of procedures discussed in Section 6.3: *Assumptions*.

7.3 Conclusion

This section contained a discussion of the findings of the research relating to the timing of audit procedures that can be performed on the audits of listed South African long-term insurers.

The next section contains a discussion of the findings of the research relating to various aspects of considering the work of internal audit as part of the overall audit strategy for insurance contracts and related earnings of listed South African long-term insurers.

8. FINDINGS RELATING TO RELIANCE ON THE WORK OF INTERNAL AUDIT

8.1 Introduction

This section contains a discussion of the findings of the research relating to considering the work of the internal audit function of the audit client during the audit of insurance contracts and the related earnings. As these considerations may affect one or more of the aspects of the nature, timing and extent of audit procedures performed by the external auditor, they are discussed in a section separate from the sections on findings relating to the nature (Section 6) and the timing (Section 7) of audit procedures.

ISA 610: *Considering the work of internal audit* (IAASB, 2005f:para. 02) (ISA 610) requires the external auditor to consider the activities of internal audit and their effect on the overall audit strategy.

8.2 Research findings

Three respondents indicated that the internal audit functions of their selected clients perform some internal audit work related to policy liabilities arising under insurance contracts and the related earnings (Questions 23 and 211). No data was available from the fourth respondent. This work of internal audit includes audit work on those parts of the in-force database relevant to policy liabilities arising under insurance contracts and the related earnings (refer to Section 2.3: *Analysis of audit hours* for a more detailed discussion in this regard). The findings in Section 2.3: *Analysis of audit hours* in fact indicate that the internal audit functions of the selected audit clients of respondents have a significant involvement in the audit of policy liabilities arising under insurance contracts and the related earnings. Three respondents also indicated that they rely on the work of internal audit as part of their overall audit strategy for the abovementioned components of the financial statements (Question 216). No data was available from the fourth respondent. This reliance is of course only justified if the external auditor has complied with the requirements of ISA 610 (IAASB, 2005f).

The three respondents elaborated on the scope of internal audit work on policy liabilities arising under insurance contracts and the related earnings by indicating that the internal audit functions of their clients perform various types of audit work (if any) in this regard (no data was available from the fourth respondent for any of the questions referred to below). An analysis and interpretation of collective responses to the questions referred to below indicated the following in this regard:

Actuarial assumptions (Question 212)

- Tests of controls over source data used as input in the derivation of assumptions.
- Substantive tests on source data used as input in the derivation of assumptions.

Source data used in the actuarial valuation process (Question 213)

- Tests of controls over source data.
- Substantive tests on the completeness and accuracy of source data.

Calculations done as part of the actuarial valuation process (Question 214)

- No audit work performed by the internal audit function of any respondent.

Reporting of the results of the actuarial valuation (Question 215)

- No audit work performed by the internal audit function of any respondent.

On the basis of the findings above it can be concluded that the scope of the work of the internal audit functions within listed South African long-term insurers in respect of policy liabilities arising under insurance contracts and the related earnings is restricted to audit work on the validity, accuracy and completeness of source data. It does not extend to actuarial calculations and reporting of the results of the actuarial valuation.

8.3 Conclusion

This section contained a discussion of the findings of the research relating to consideration of the work of the internal audit function of the long-term insurance client in the overall external audit strategy for insurance contracts and the related earnings of listed South African long-term insurers. The documentation of such overall audit strategy should include, *inter alia*, the reasons for and extent of reliance by the external auditor on the work of the internal audit function of the client.

This concludes the analysis and discussion of the findings of the research relating to the nature and timing of audit procedures to be included in the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings.

The next section contains a discussion of the findings relating to miscellaneous aspects relating to the audit of policy liabilities arising under insurance contracts and the related earnings not covered elsewhere in this dissertation.

9. FINDINGS RELATING TO MISCELLANEOUS OTHER MATTERS RELEVANT TO THE AUDIT OF POLICY LIABILITIES ARISING UNDER INSURANCE CONTRACTS AND THE RELATED EARNINGS

9.1 Introduction

This section contains a discussion of the research findings relating to various aspects of the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers that could not be logically and coherently covered elsewhere in this dissertation.

9.2 Changes in overall audit strategies since 1998

The expected significant impact of the introduction of SAAS 620: *Using the work of an expert* (PAAB, 1998) on overall audit strategies for insurance contracts and the related earnings is discussed in Chapter 1, Section 2.3.3: *Complexity of the actuarial valuation process* and in Chapter 6, Section 3.2: *The auditor*. Since the introduction of this standard, audit opinions on the financial statements of South African long-term insurers have included policy liabilities and the related earnings, which is hypothesised in this research to have increased the inherent risk characteristics of these items and consequently the complexity of the related overall audit strategies. Consequently, 1998 can be regarded as an important turning point in the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of South African long-term insurers. SAAS 620 (PAAB, 1998) has recently been superseded by ISA 620: *Using the work of an expert* (IAASB, 2005), which differs in no significant respects from its predecessor.

As was discussed in Chapter 2, Section 2: *Research objective and value*, this research makes a significant contribution by providing input into the revision of the existing audit guidance for South African long-term insurers, *inter alia* by drawing on the practical experience and insights of experienced audit practitioners since the introduction of the abovementioned new requirements. Findings in this regard are discussed in this section.

All three respondents (no data was available from the fourth respondent) and QR indicated that their overall audit strategies for insurance contracts and the related earnings had undergone significant changes since the introduction of SAAS 620 (PAAB, 1998) in 1998 (Question 220). An analysis and interpretation of collective responses to Questions 220 and 221 indicated that these changes are mainly in respect of the following areas (no data was available from the fourth respondent):

- Increased focus on the audit of policy liabilities arising under insurance contracts and, by implication, the related earnings (also supported by QR).
- As a result of the abovementioned increased focus, the engagement of an actuarial expert to assist in performing the audit (also supported by QR). Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* contains a detailed discussion of the findings of the research in this regard.

These findings provide strong support for the abovementioned hypothesis that, due to an increase in the inherent risk characteristics and the complexity of the audit strategies for insurance contracts and the related earnings, the focus on these areas within overall audit strategies has increased since 1998.

9.3 Audit of smaller, non-listed South African long-term insurers

As was discussed in point 5 of Chapter 2, Section 3: *Overall research design and method*, all three respondents (no data was available from the fourth respondent) were of the opinion that the overall audit strategy for a smaller, non-listed South African long-term insurer should not be significantly different from that for a listed South African long-term insurer (Question 224).

The author concurs with this view, *inter alia* on the basis of the fact that the South African long-term insurance industry is highly regulated and therefore companies in the industry require a proper, reliable audit, and also because, as custodians of the retirement monies of many South Africans, these companies have a heightened public responsibility that includes reliable financial reporting. QR supported this conclusion.

No attempt was therefore made to customise the framework developed in this research for the audit of smaller, non-listed South African long-term insurers.

9.4 Conclusion

This section contained a discussion of the research findings relating to changes in overall audit strategies for listed South African long-term insurers since 1998 and a consideration of the customisation of the framework developed in this research for the audit of smaller, non-listed South African long-term insurers. The research findings supported a decision not to customise the latter framework for the audit of smaller, non-listed insurers.

The final, overall conclusion of this chapter is contained in the next section.

10. OVERALL CONCLUSION

This chapter was devoted to a detailed analysis and discussion of the findings of the research relating to overall audit strategies for insurance contracts and the related earnings of listed South African long-term insurers, excluding those related to the incorporation of actuarial expertise into the overall audit strategy. The latter is analysed and discussed in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

Where not obvious from the analysis and discussion of responses, conclusions were drawn relating to a suggested overall audit strategy to be followed in the particular area. Therefore, the combination of conclusions in this chapter with those in Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy* comprise the best practice framework for the formulation of overall audit strategies for insurance contracts and the related earnings of listed South African long-term insurers, which in turn meets the objective of the research as discussed in Chapter 2, Section 2: *Research objective and value*.

As was explained in the introduction to this chapter, it should be borne in mind that where one or more respondents to any question proposed a particular view, this view cannot be ignored in the development of an overall audit strategy for a particular client merely because it is a minority view. It might be appropriate in particular circumstances and should therefore be considered in the development of an overall audit strategy for a particular client, in addition to the views expressed by the majority of respondents, including Deloitte.

The conclusions reached in this and the next chapter can be used by standard setters to update and improve the existing guidance for auditors of South African long-term insurers as described in Chapter 2, Section 2: *Research objective and value*. In support of this view, after having completed the questionnaire, three of the four respondents commented without solicitation that they had found the nature and scope of the questions contained therein very thought-provoking and that it had already prompted them to afford their overall audit strategies for insurance contracts and the related earnings renewed consideration in future.

The next chapter contains an analysis, interpretation and discussion of the findings of the research relating to the incorporation of actuarial expertise into the overall audit strategy for insurance contracts and the related earnings and should be read in conjunction with this chapter.

CHAPTER 6
THE INCORPORATION OF ACTUARIAL EXPERTISE INTO THE OVERALL AUDIT STRATEGY

	Page
1. INTRODUCTION	273
2. INTERNATIONAL AND LOCAL PROFILE OF THE ACTUARY	273
3. RESPONSIBILITIES OF THE STATUTORY ACTUARY AND AUDITOR	277
3.1 Introduction	277
3.2 The auditor	277
3.3 The statutory actuary	278
3.4 Conclusion	280
4. EXISTING GUIDANCE RELATING TO OVERALL AUDIT STRATEGIES	281
4.1 Existing international guidance	281
4.2 Existing South African guidance	284
5. EMPIRICAL RESEARCH FINDINGS RELATING TO THE INCORPORATION OF ACTUARIAL EXPERTISE INTO THE OVERALL AUDIT STRATEGY	286
5.1 Introduction	286
5.2 Actuarial expertise in the audit process	288
5.3 Reliance on the work of an actuary	295
5.3.1 <i>Introduction</i>	295
5.3.2 <i>Findings relating to all audits of listed South African long-term insurers</i>	295
5.3.2.1 <i>General</i>	295
5.3.2.2 <i>Competence and expertise of the actuarial expert</i>	298
5.3.2.3 <i>Objectivity and independence of the actuarial expert</i>	299
5.3.2.4 <i>Scope of the work of the actuarial expert</i>	300
5.3.2.5 <i>Appropriateness of the work of the actuarial expert as audit evidence</i>	301
5.3.2.6 <i>Review and conclusion of the audit</i>	303

5.3.3	<i>Findings relating to audits where the auditor relies on the work of the statutory actuary</i>	309
5.3.3.1	<i>Competence and expertise of the statutory actuary</i>	310
5.3.3.2	<i>Objectivity and independence of the statutory actuary</i>	310
5.3.3.3	<i>Scope of the work of the statutory actuary</i>	312
5.3.3.4	<i>Appropriateness of the work of the statutory actuary as audit evidence</i>	314
5.3.3.5	<i>Communication between the auditor and the statutory actuary</i>	315
5.4	Conclusion	321
6.	PITFALLS AND PROBLEMS	322
6.1	Introduction	322
6.2	Research findings	323
6.2.1	<i>Lack of experience of audit staff and complexity of actuarial valuation process</i>	323
6.2.2	<i>Improper project management</i>	325
6.2.3	<i>Unwarranted reliance on the work of the statutory actuary</i>	325
6.2.4	<i>Appropriateness of the work of the statutory actuary</i>	326
6.2.5	<i>Strained relationship between professions</i>	326
6.3	Conclusion	327
7.	OVERALL CONCLUSION	328

LIST OF TABLES

	Page
Table 6-1: Overall audit strategy alternatives for actuarial expertise	289
Table 6-2: Full-time employment of qualified actuaries by auditing firms	291
Table 6-3: Primary reasons for the use of independent consulting actuaries	292
Table 6-4: Contents of engagement letter of independent consulting actuary	294
Table 6-5: Factors to consider when assessing risk of error in work of actuarial expert	297
Table 6-6: Courses of action: doubt about sufficiency or appropriateness of actuarial expert's work	302
Table 6-7: Factors to consider when reviewing findings of actuarial expert	303
Table 6-8: Circumstances in which auditor should review working papers of actuarial expert	304
Table 6-9: Circumstances in which a second actuarial expert should be considered	306
Table 6-10: Documentation to be included in audit working papers	308
Table 6-11: Actuarial documentation useful for audit purposes	315
Table 6-12: Matters to be covered in record of understanding or terms of reference	317
Table 6-13: Matters to be discussed with statutory actuary during audit planning	318
Table 6-14: Order of communication between auditor and statutory actuary	319
Table 6-15: Challenges and problems experienced by auditors	323

1. INTRODUCTION

The statutory actuary (including the actuarial department of the long-term insurer reporting to him/her) is probably the single person who has the most significant influence on the actuarial valuation process and, consequently, on policy liabilities arising under insurance contracts and the related earnings in the financial statements of a listed South African long-term insurer. The latter two components of the financial statements of these long-term insurers have, in turn, been proven in this research to be the industry-specific areas in the financial statements potentially exposed to the highest relative levels of inherent risk (refer to Chapter 3: *High inherent risk elements in financial statements of listed South African long-term insurers*). Against this background it was decided to devote this separate chapter in the dissertation to various aspects of the relationship between the auditor and person providing actuarial expertise (who could be the statutory actuary) in the audit of a listed South African long-term insurer.

The chapter commences with a description of the profile of an actuary, followed by a discussion of the roles and responsibilities of the statutory actuary as opposed to those of the auditor in the audit of a South African long-term insurer. An exposition of various alternative overall audit strategies relating to the relationship between the auditor and the statutory actuary incorporates a review of local and international literature on this topic and an analysis, interpretation and discussion of the responses to questions in the questionnaire contained in Appendix G and discussed in more detail in Chapter 5, Section 1: *Introduction*. The chapter concludes with a discussion of potential pitfalls and problems arising from the relationship between the respective parties, including suggested courses of action to address these.

2. INTERNATIONAL AND LOCAL PROFILE OF THE ACTUARY

Dorrington (1991:2) contends that explaining the nature of the work of an actuary to the layman is a problem as yet unsolved by the members of the actuarial profession internationally. Slattery (2004:5) proposes that actuaries distinguish themselves from other professions by means of a deep understanding of the value of contingent future

cash flows. This characteristic is described by Dorrington (1991:6) as a highly developed “sense of time”.

O'Regan (2004:11) defines an actuary as an “individual who undertakes mathematical and statistical analysis of the risks and probability estimates that underlie insurance schemes and pension plans.” The *Audit Guide on Long-Term Insurance* (SAICA, 1998a:36) expands on this view by defining an actuary as a “person professionally trained in the mathematical and technical aspects of insurance and related fields, particularly in the calculation of premiums, reserves and other values”. Whereas O'Regan's definition appears to be restricted to the insurance and retirement industries, the SAICA definition is wider (“...and related fields”), and is supported by both Dorrington (1991) and Slattery (2004), as discussed below.

Dorrington (1991:3) explains that an actuary's responsibility is to determine “the financial consequences and current cost of future contingent events” and to advise on “appropriate current responses to these prospective events”. He expands on this view by stating that the actuary's expertise is potentially useful to every individual and organisation, as virtually all of these are exposed to uncertain future events, most of which will have financial implications (Dorrington, 1991:6).

Slattery (2004:5) supports this notion and adds expertise in financial risk as one of the characteristics of the actuary. He also adds that actuaries are able to provide realistic solutions to complex problems with a forward-looking perspective.

The areas in which actuaries work appear to support the abovementioned wider interpretations of the definition of an actuary by Dorrington and Slattery. These areas include:

- Life assurance (Dorrington, 1991:7 and Slattery, 2004:6).
- Retirement plans (Dorrington, 1991:7 and Slattery, 2004:6).
- Short-term insurance (Dorrington, 1991:7 and Slattery, 2004:6).
- Investments (Dorrington, 1991:7 and Slattery, 2004:6).
- Corporate management (Dorrington, 1991:8).
- Healthcare financing (Slattery, 2004:6).

- Environmental impact evaluations (Dorrington, 1991:8 and Slattery, 2004:8).

Applying the various elements of the definitions of an actuary as discussed above to an actuary's responsibilities in a South African long-term insurer in the context of this research implies that they include:

- the prospective actuarial valuation of policy liabilities arising under insurance contracts (refer to Chapter 5, Section 2.7: *Product profiles*);
- the determination of premium and other rates appropriate to the extent of risk accepted by the insurer (known as "underwriting" and discussed in Chapter 5, Section 4.2: *The underwriting process*);
- the determination of appropriate bonus rates for participating insurance contracts (refer to Chapter 5, Section 6.3.3: *Derivation of assumptions*); and
- derivation of appropriate actuarial assumptions (refer to Chapter 5, Section 3.5: *Knowledge relating to actuarial assumptions*, Section 4.5: *Processes relating to actuarial assumptions* and Section 6.3: *Assumptions*).

It should be noted that the full range of responsibilities of the statutory actuary of a South African long-term insurer extends far beyond the abovementioned areas to include, for example, reporting to the Registrar of Long-Term Insurance, approving dividend declarations and preparation and disclosure of embedded value information (refer to PGN 107: *Embedded values and value of new business* (ASSA, 2001a) for details regarding embedded values). The responsibilities identified in the previous paragraph are examples of those specifically relevant to the scope of this research (refer to Chapter 2: *Research objective, design, method and scope*).

Actuaries may perform certain statutory work in South Africa (including being appointed as statutory actuary of a South African long-term insurer (South Africa, 1998a:Section 20(3)) only if they are Fellow members of the Actuarial Society of South Africa (ASSA). To qualify for such membership, professional examinations of

either the Institute of Actuaries (based in the United Kingdom) or the Faculty of Actuaries (based in Scotland) have to be successfully completed (ASSA, 2005)¹.

These examinations have always been very demanding, resulting in:

- relatively low pass rates but relatively high quality actuaries; and
- a relatively small actuarial profession worldwide and in South Africa (500 local practising qualified actuaries) (Slattery, 2004:5-6).

To conclude this discussion on the profile of the actuary, Slattery (2004:21) predicts the main challenges facing the actuary in the long-term insurance industry in future to include the following issues directly relevant to this research:

- The realisation that actuaries do not have a monopoly on the interpretations of issues such as “fairness”. He suggests that a closer working relationship with other professions (including, by inference, possibly the auditing profession) is required to address this challenge.
- Actuarial control in long-term insurance requires scrutiny. This includes valuations and the reporting of earnings as discussed in Chapter 1: *Introduction and background*.

Basson (2004d:16) adds the challenge of pressure resulting from the actuary’s responsibility to allocate profit between policyholders and shareholders on an equitable basis. Some further challenges relate to a perceived lack of transparency in disclosures to policyholders, as was discussed in Chapter 1, Section 2.1: *The South African long-term insurance industry*.

The next section contains a discussion of the roles and responsibilities of the statutory actuary as opposed to those of the auditor in the audit of a South African long-term insurer.

¹ Corresponding requirements for the other countries included in this research are:

- Australia: Membership of the Institute of Actuaries of Australia with its own examinations.
- Canada: Membership of the Canadian Institute of Actuaries (examinations of the Society of Actuaries in the USA).
- New Zealand: Membership of the New Zealand Society of Actuaries (examinations of mainly the Institute of Actuaries in the UK).
- UK: Membership of the Institute of Actuaries (UK) or Faculty of Actuaries (Scotland), each with its own examinations.
- USA: Membership of the Society of Actuaries with its own examinations.

3. RESPONSIBILITIES OF THE STATUTORY ACTUARY AND AUDITOR

3.1 Introduction

This section contains a discussion of the respective roles and responsibilities of the statutory actuary and the auditor of a South African long-term insurer. As the roles and responsibilities discussed include only those that are directly relevant to the scope of this research, it should be borne in mind that both the abovementioned parties have a myriad of other roles and responsibilities not relevant to, and therefore not included in, the scope of this research.

3.2 The auditor

Section 301 of the Companies Act, No. 61 of 1973 (South Africa, 1973), imposes on the auditor the duty to report on whether the financial statements of a company, including a long-term insurer, fairly present the financial position and results of operations of the company. In performing this duty, the auditor has to comply with the requirements for expressing such an opinion that are contained in Section 20 of the Public Accountants and Auditors Act, No. 80 of 1991 (South Africa, 1991).

The auditor also has to comply with the prevailing South African auditing pronouncements. With effect from 1 January 2005, all auditing pronouncements, including International Standards on Auditing issued by the IAASB of IFAC, have been adopted as the prevailing auditing pronouncements in South Africa (PAAB, 2004:para. 1).

Of particular importance in the context of this research is compliance with ISA 620: *Using the work of an expert* (IAASB, 2005I) (previously SAAS 620: *Using the work of an expert* (PAAB, 1998)). Section 19(9) of the Long-Term Insurance Act (South Africa, 1998a) allows the auditor to rely on the work of the statutory actuary in expressing an opinion in relation to the financial affairs of the insurer, provided that prevailing auditing standards (including, in particular, ISA 620) have been complied with.

As was mentioned in Chapter 1, Section 2.3.3: *Complexity of the actuarial valuation process*, the introduction of SAAS 620 in 1998 resulted in a watershed for the auditors of South African long-term insurers. As they could rightfully exclude policy liabilities and the related earnings from their audit opinions issued prior to 1 October 1998, some auditors chose to do so. The audit report on the financial statements of Sanlam for the 1997 financial year, for example, stated that “[t]he actuarial values are determined by the chief actuary and he has reported on the financial soundness of the company. ... We do not report on the strengthening of policy liabilities and the earnings of the capital fund as set out in the operating statement, and the policy liabilities as set out in the balance sheet and Notes...” (Von Wielligh, 2001a:8).

The introduction of SAAS 620 repealed the abovementioned exclusion for all audit reports issued on or after 1 October 1998. Auditors of South African long-term insurers have since been required to include policy liabilities and the related earnings in the scope of their audit opinions, which necessitates some form of relationship between the auditor and the statutory actuary during the audit process.

Research by Adams, *et al.* (1997:83) suggests that, in addition to the abovementioned responsibilities, external auditors also perform a monitoring and control (“watchdog”) function in long-term insurers, particularly in larger, diversified insurers.

A discussion of the roles and responsibilities of the statutory actuary follows in the next section.

3.3 The statutory actuary

All South African long-term insurers are required at all times to have a statutory actuary in accordance with Section 20 of the Long-Term Insurance Act, No. 52 of 1998 (South Africa, 1998a). The appointment of the statutory actuary has to be approved by the Registrar of Long-Term Insurance (South Africa, 1998a:Section 20(4)).

The statutory actuary has a professional duty to monitor the financial soundness of the long-term insurer, largely to protect the interests of policyholders. This process includes annual valuations of policy liabilities using the Financial Soundness method as described in Chapter 5, Section 2.7: *Product profiles*, and reporting thereon to the board of directors of the insurer (ASSA, 2004:para. 2.3). The Office of the Superintendent of Financial Institutions Canada describes this responsibility of the Canadian counterpart of the statutory actuary as “a kind of guardian of the company’s well-being” (OSFI, 2001:2).

The Professional Guidance Notes (PGNs) issued by the ASSA require the statutory actuary to include a report in the annual report of the long-term insurer “to give readers of the annual financial statements a fair picture of the overall financial strength of the insurer, as well as its profitability” (ASSA, 2002:para. 1.5). PGN 104: *Life offices – financial soundness valuation* (ASSA, 2001b) provides guidance to the statutory actuary in discharging this responsibility in relation to the valuation of assets and liabilities using the Financial Soundness method.

The statutory actuary is also responsible for identifying and monitoring risks to which the insurer is exposed in as far as these may significantly affect the financial soundness of the insurer (ASSA, 2004:para. 3.1).

With regard to participating insurance contracts (refer to Chapter 5, Section 2.7: *Product profiles* and Chapter 5, Section 6.3.3: *Derivation of assumptions*), the statutory actuary is required to advise the board of directors of the insurer regarding the interpretation of policyholders’ reasonable expectations (ASSA, 2004:para. 3.5).

The statutory actuary must also be satisfied that the procedures for determining unit prices and the creation and cancellation of units in the case of unit-linked business (refer to Chapter 5, Section 6.6: *Actuarial calculations*) are functioning properly (ASSA, 2004:para. 4.9).

With regard to the actuarial investigation (or valuation) and related matters, responsibilities of the statutory actuary include:

- Accuracy of source data used in the valuation process (ASSA, 2004:para. 5.1).
- Implementation and maintenance of internal control systems over the valuation process (ASSA, 2004:para. 5.2).
- Selection of appropriate valuation methods (ASSA, 2004:para. 5.2).
- Selection of appropriate valuation assumptions (ASSA, 2004:para. 5.3-5.8).
- Advising the board of directors regarding the allocation of any excess of assets over liabilities to shareholders' funds (resulting in earnings for shareholders) (ASSA, 2004:Section 7).

In the performance of these duties, the statutory actuary must remain objective and free from bias by following the guidance contained in a code of professional conduct issued by the ASSA (ASSA, 2004:para. 2.8).

3.4 Conclusion

The critical role of the actuary and his/her significant influence on policy liabilities and the related earnings were clearly demonstrated in this section. It is also clear from the discussion above that both the auditor and the statutory actuary have far-reaching reporting responsibilities. That these responsibilities can only be effectively and efficiently discharged if these two professionals co-operate, is demonstrated in the requirement of PGN 103: *The report by the statutory actuary in the annual financial statements of South African long-term insurers* that the auditor and the actuary should "work closely together" (ASSA, 2002:para. 1.7). Adams, *et al.* (1997:75) believe that the proper performance of specialist functions by the actuary can indeed result in a reduction in the extent of monitoring of policyholders' and shareholders' interests by external auditors.

From the perspective of the auditor, this co-operation can only take place against the background of the requirements of ISA 620 (IAASB, 2005), the application of which in the audit of a South African long-term insurer is the focal point of a significant part of the remainder of this chapter.

The next section contains a discussion of the existing international and local guidance relating to alternative overall audit strategies in respect of the relationship between the auditor and the statutory actuary of a long-term insurer.

4. EXISTING GUIDANCE RELATING TO OVERALL AUDIT STRATEGIES

Mention was made in Chapter 5, Section 2.3: *Analysis of audit hours* of various alternative overall audit strategies that can be employed in respect of the relationship between the auditor and the statutory actuary. The extent and prescriptiveness of existing international and local guidance in this regard are discussed in this section. The findings of this research indicated that various different alternatives are currently in use in the South African environment (refer to Chapter 5, Section 2.3: *Analysis of audit hours*).

4.1 Existing international guidance

It is clear from the American audit and accounting guide on life and health insurance entities that the relationship between the auditor, the insurer and the actuary may have an impact on the overall audit strategy for insurance contracts and the related earnings followed by the external auditor (AICPA, 2003:para. 5.47).

The American guidance is very prescriptive and requires the use of “an outside qualified actuary, that is, one who is neither an employee nor an officer of the entity” (outside qualified actuary) in the audit of actuarially determined policy liabilities (AICPA, 2003:para. 5.44). The only instance in which this requirement does not apply, is if the auditor is also a qualified actuary. Where an outside qualified actuary is used, the auditor is required to understand the methods and assumptions used by the actuary to assess the appropriateness of the actuary’s findings as audit evidence (AICPA, 2003:para. 5.45).

The fact that the statutory actuary of a South African long-term insurer is not required to be a full-time employee of the insurer is discussed in Section 4.2: *Existing South African guidance*. The American guidance discussed in the previous paragraph

requires specific audit strategies to be applied in various different scenarios in this regard (AICPA, 2003:para. 5.47):

- If no actuaries at all are involved in the determination of policy liabilities, the outside qualified actuary is required to develop an independent expectation of the value of policy liabilities to be compared to those of the insurer. This scenario is very rare if not non-existent in the South African environment.
- If policy liabilities are determined solely by a qualified actuary who is a full-time employee of the insurer and no outside qualified actuaries are involved in the determination of the liabilities, the auditor is required to make use of an outside qualified actuary to assess the reasonableness of the liabilities. In this scenario, unlike the first scenario above, the nature and extent of the work of the outside qualified actuary is not prescribed in the guidance.
- If the insurer has no in-house qualified actuaries and makes use of an outside qualified actuary (consulting actuary) to determine policy liabilities, the auditor is required to evaluate the extent of the involvement of the outside qualified actuary in the determination of the liabilities. If this extent is significant (which one would expect to be the case), the auditor should perform additional audit procedures (the nature and extent of which are not prescribed) on areas such as actuarial methods, assumptions and findings. These additional audit procedures can be performed by the auditor him/herself or by an outside qualified actuary engaged by the auditor for this purpose.
- If policy liabilities are determined by an in-house qualified actuary and thereafter reviewed by an outside qualified actuary (consulting actuary) engaged by the insurer, the auditor is allowed to use the separate review performed by the consulting actuary as part of audit evidence.

It is clear from the above that the American guidance always requires a greater or lesser involvement of an outside qualified actuary as part of the overall audit strategy for insurance contracts and the related earnings (AICPA, 2003:para. 8.100).

The Canadian guidance in Section 5049: *Use of specialists in assurance engagements* (CICA, 2002:para. .09-.17) also describes various scenarios relating to the involvement of “specialists”, which, for the purpose of this research, are

interpreted to include a qualified actuary. The following scenarios, which overlap to a significant extent with those identified in the American guidance, are identified:

- The qualified actuary works independently of the auditor and the insurer and the findings of the qualified actuary are used as audit evidence (CICA, 2002:para. .10).
- Qualified actuaries are involved as an integral part of the overall audit strategy, by being involved in audit planning, the performance of audit work and the consideration of audit findings (CICA, 2002:para. .11). These actuaries are often full-time employees of the auditing firm, but may also be contracted from elsewhere.
- The **auditor** engages a qualified actuary to perform certain work on which the auditor wishes to rely (CICA, 2002:para. .12). The relationship between the abovementioned two parties is often formalised in writing and the auditor should assess the actuary's expertise, competence and integrity.
- The **insurer** engages an outside qualified actuary (consulting actuary) to review the work of its in-house actuaries (CICA, 2002:para. .13). The actuary's expertise, competence and integrity should be assessed by the auditor.
- Policy liabilities are determined by qualified actuaries employed by the insurer (CICA, 2002:para. .16). The extent of the potential audit assurance provided by the actuary in this scenario is less than that provided by an actuary independent of the insurer. The auditor should assess the impact of the lack of independence on the sufficiency and appropriateness of audit evidence obtained from reliance on the work of the actuary.
- Qualified actuaries are employed (as opposed to engaged or contracted in) by the auditing firm (CICA, 2002:para. .17). In this scenario, the auditor has assurance with regard to the expertise, competence and integrity of the actuary through the quality control policies and procedures of the auditing firm.

In summary, the Canadian guidance is less prescriptive than the American guidance and does not require the involvement of an outside qualified actuary in the audit of all long-term insurers.

A review of the relevant existing guidance in Australia, New Zealand and the United Kingdom (refer to the scope of the research as described in Chapter 2, Section 5.3: *Literature review*) indicated that the guidance in these countries is generally less detailed than that of the United States of America and Canada, as it does not identify different overall audit strategies to be used in different scenarios. The involvement of an outside qualified actuary in the audit is also not required by any of the former countries. The focus of the guidance is on the auditor's assessment of the work of a qualified actuary upon which (s)he wishes to rely, regardless of the nature of the relationship (if any) between the auditor, the long-term insurer and the qualified actuary.

The existing guidance in each of Australia, Canada, New Zealand, the United Kingdom and the United States of America (refer to Table 2-2 in Chapter 2) requires the auditor to obtain sufficient appropriate audit evidence that the work of a qualified actuary upon which the auditor intends to rely, is adequate for audit purposes. To achieve this objective, the auditor should:

- assess the competence and expertise of the actuary;
- assess the objectivity of the actuary (including independence);
- obtain evidence that the scope of the work of the actuary is sufficient for audit purposes; and
- assess the appropriateness of the work of the actuary as audit evidence.

The detailed guidance on the overall audit strategy to be employed to achieve the abovementioned objectives is largely similar in the guidance of all international countries reviewed, and although in some instances more detailed, also similar to existing South African guidance. This detailed guidance is therefore not discussed here, but included in the discussion of the responses to the relevant questions in the questionnaire, contained in Section 5: *Empirical research findings relating to the incorporation of actuarial expertise into the overall audit strategy*.

4.2 Existing South African guidance

Section 20(1) of the Long-Term Insurance Act, No. 52 of 1998 (South Africa, 1998a), requires South African long-term insurers to at all times have a statutory actuary

whose appointment is approved by the Registrar of Long-Term Insurance. The abovementioned act contains no requirement for the statutory actuary to be an employee of the insurer. The insurer therefore can appoint a qualified actuary as its statutory actuary on a contract basis, provided that the Registrar of Long-Term Insurance approves such appointment. This type of arrangement is not unique to the South African environment, but also exists in other countries, including Canada (refer to OSFI, 2001:7).

In practice, although the larger South African long-term insurers often appoint a full-time employee as their statutory actuaries (also common in the Australian long-term insurance industry (AARF, 2002b:para. 12)), some of the smaller insurers appoint qualified actuaries on a contract basis. In response to Question 24 in the research questionnaire contained in Appendix G, as expected, three of the four respondents indicated that the statutory actuaries of their selected audit clients (being large listed long-term insurers) are full-time employees of the respective insurers. No data was available from the fourth respondent for confidentiality and other reasons, as was discussed in Chapter 5, Section 1: *Introduction*.

The existing South African guidance relevant to the relationship between the auditor and the statutory actuary in the audit of a long-term insurer consists of:

- *Audit Guide on Long-Term Insurance* (SAICA, 1998a);
- Audit guide entitled *The Auditor's Relationship with the Statutory Actuary in the Long-Term Insurance Industry* (SAICA, 1998b); and
- *ISA 620: Using the work of an expert* (IAASB, 2005I).

A review of this literature indicated that no South African guidance exists on alternative audit strategies to be followed in each of the possible different scenarios as described in equivalent international guidance (refer to Section 4.1: *Existing international guidance*). As is the case in all countries included in this research other than the United States of America, no requirement currently exists for the involvement of an outside qualified actuary in the audit of a South African long-term insurer.

Limited (albeit possibly outdated) guidance does, however, currently exist in South Africa on the overall audit strategy for policy liabilities in general, including areas such as:

- knowledge of the business;
- control environment;
- actuarial assumptions;
- source data;
- actuarial calculations; and
- analytical procedures.

A discussion of the abovementioned guidance is included throughout Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and in the following section in the discussion of the responses to the questionnaire used in this research and contained in Appendix G.

The next section contains a discussion of the empirical findings of this research relating to the incorporation of actuarial expertise into overall audit strategies for listed South African long-term insurers.

5. EMPIRICAL RESEARCH FINDINGS RELATING TO THE INCORPORATION OF ACTUARIAL EXPERTISE INTO THE OVERALL AUDIT STRATEGY

5.1 Introduction

This section contains an analysis, interpretation and discussion of the responses to questions in the questionnaire specifically related to the relationship between the auditor and the person providing actuarial expertise in the audit of a listed South African long-term insurer (actuarial expert). It is an extension of the findings discussed in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and should be read in conjunction with the latter to properly understand its context.

As in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies*, findings are contextualised throughout this section by providing background and explanations from relevant literature reviewed and experience of the researcher. Chapter 1: *Introduction and background* also contains information that serves to contextualise the findings discussed in this section.

Where relevant, references to the related question numbers in the questionnaire contained in Appendix G are provided². The incorporation of the opinions of Deloitte into the dissertation (refer to Chapter 2, Section 4.3: *Data collection*) were documented separately from responses to the questionnaire and appear in the dissertation as references to “QR” (Quality Review).

As was explained in Chapter 2, Section 4.3: *Data collection*, the abovementioned questionnaire contained different types of questions designed for different purposes (i.e. to elicit different types of responses), including a mix of open and closed-ended questions, and free-form and forced-choice questions. Consequently, the analysis and interpretation of the responses to the different types of questions are also different, in the following way:

- Questions where the level of support by respondents for a particular matter is important, are discernable in the dissertation from the use of wording such as “the number of respondents who indicated each [matter] appears in brackets after the [matter]” or from the tabulation of the number of respondents in a table.
- Questions designed to elicit examples or free-form descriptions of matters where the level of support of respondents for each matter is not regarded as important,

² Responses to all questions contained in the questionnaire have been incorporated into this dissertation, except those (if any) to the following questions, reasons for which are given below:

- Questions 32, 33 and 187: These questions would only have been applicable to respondents under certain circumstances. The circumstances proved not to be applicable to any respondents.
- Question 37: Similar information was obtained from Questions 44 and 210.
- Question 172: Similar information was obtained from Question 174.
- Question 193: Subsequent to the distribution of the final questionnaires for completion, it was decided that the question fell outside the scope of the research as it focussed on surrenders as a type of policy benefit as opposed to policy liabilities.
- Question 202: Similar information was obtained from Question 203.

are discernable in the dissertation from the use of words such as “analysis and interpretation of collective responses to Question [x] indicated that ...”.

Section 5.2: *Actuarial expertise in the audit process* contains a discussion of findings related to the demographic information of respondents regarding the incorporation of actuarial expertise into the overall audit strategies for their audit clients selected for this research and **general** considerations regarding the use of consulting actuaries. Section 5.3: *Reliance on the work of an actuary* contains a discussion of findings relating to **specific** considerations in respect of the incorporation of actuarial expertise into the overall audit strategy, followed by Section 5.4: *Conclusion*.

5.2 Actuarial expertise in the audit process

As was mentioned in Chapter 5, Section 2.3: *Analysis of audit hours*, depending on a number of factors including the mix of in-force investment and risk products of the insurer, the complexity of its actuarial valuation process and the relevant expertise and experience of the auditor, different alternatives exist for the relationship between the auditor and the actuarial expert. These alternatives, a combination of which can be utilised by the auditor in the overall audit strategy, are:

- The auditor uses the work of the statutory actuary of the long-term insurance client appointed in accordance with Section 20 or 21 of the Long-Term Insurance Act (South Africa, 1998a).
- The auditor uses the work of qualified actuaries **employed** by the auditing firm.
- The auditor uses the work of qualified actuaries independent of the auditing firm who have been **engaged** as consulting actuaries by the long-term insurance client, the auditing firm, or both.

Table 6-1 contains an analysis of responses regarding which of the abovementioned alternatives are being utilised by respondents in the overall audit strategy followed for their selected clients (Questions 160 and 164). Where a combination of alternatives is used, respondents had the option to select more than one alternative.

Table 6-1: Overall audit strategy alternatives for actuarial expertise

Overall audit strategy	No. of responses
No specific actuarial expertise is used – reliance is placed on the work of the statutory actuary in compliance with ISA 620 (IAASB, 2005I)	0
Actuaries employed by the auditing firm (locally or international) serve as audit team members	3
Reliance is placed on independent consulting actuaries engaged by the auditing firm as experts in compliance with ISA 620 (IAASB, 2005I)	1
Reliance is placed on independent consulting actuaries engaged by the client as experts, in compliance with ISA 620 (IAASB, 2005I)	0
TOTAL	4

It can be concluded from Table 6-1 that the auditors of listed South African long-term insurers make use of different models for the incorporation of actuarial expertise into the audit process. QR supported this conclusion.

As was mentioned in Section 3.2: *The auditor*, Section 19(9) of the Long-Term Insurance Act, No. 52 of 1998 (South Africa, 1998a), allows the auditor of a long-term insurer to rely on the work of the statutory actuary when expressing an opinion on its financial statements, subject to compliance with prevailing auditing standards. As was mentioned in Section 4.2: *Existing South African guidance*, the current *Audit Guide on Long-Term Insurance* (SAICA, 1998a), read with the SAICA guide entitled *The Auditor’s Relationship with the Statutory Actuary in the Long-Term Insurance Industry* (SAICA, 1998b), currently allows the auditor to rely solely on the statutory actuary of the client for audit purposes, provided that the requirements of ISA 620 (IAASB, 2005I) have been met. No requirement for auditors to make use of other outside actuarial experts (e.g. consulting actuaries or actuaries employed by the auditing firm) therefore currently exists in the South African environment.

Respondents were asked whether they believed that it would ever constitute an appropriate overall audit strategy for the auditor of a listed South African long-term insurer to rely **solely** on the statutory actuary of the client as the only expert (or specialist) in the audit of policy liabilities arising under insurance contracts and the related earnings (Questions 30 and 31). None of the four respondents indicated that such reliance would be appropriate in the audit of a listed South African long-term insurer and QR supported this view. This finding is corroborated by the findings in Table 6-1, namely that no respondents make use of this type of overall audit strategy on their selected audit clients.

On the basis of these findings it can be concluded that it is not appropriate for the auditor of a listed South African long-term insurer to rely solely on the work of the statutory actuary as actuarial expert in the audit of insurance contracts and the related earnings. It is therefore recommended that existing South African audit guidance should be updated to disallow such overall audit strategies for listed South African long-term insurers. QR strongly supported this recommendation.

The findings of this research relating to overall audit strategies where reliance is placed on the work of the statutory actuary are nevertheless discussed in Section 5.3.3: *Findings relating to audits where the auditor relies on the work of the statutory actuary*, as, notwithstanding the abovementioned recommendation in this research, current audit guidance still allows such reliance. Also, in support of including the abovementioned section in the dissertation, QR pointed out that, in situations where the statutory actuary of a smaller, non-listed insurer is appointed on a contract basis as opposed to being a full-time employee of the company (refer to Section 4.2: *Existing South African guidance*), a degree of independence is introduced between the statutory actuary and the insurer. This independence may allow the auditor to consider reliance solely on the work of the statutory actuary. Section 5.3.2.3: *Objectivity and independence of the actuarial expert* includes a discussion of the impact of this scenario on the overall audit strategy.

Respondents were required to indicate whether their respective local and international auditing firms employ qualified actuaries as full-time employees (Question 161). Respondents who responded affirmatively were asked to indicate which of the qualified actuaries (South African and/or international) are involved in the audit of their selected audit clients (Question 162). Table 6-2 contains an analysis of their responses.

Table 6-2: Full-time employment of qualified actuaries by auditing firms

Employment	Employment (No. of responses)	Involved in audit (No. of responses)
South African firm employs qualified actuaries, either directly or as alliance partners	4	3
International firm employs qualified actuaries	4	3
Qualified actuaries are not employed by the South African or international firm	-	-

The right-hand column of Table 6-2 indicates that the majority of respondents make use of qualified actuaries employed by either their local or international firms in the audit of listed South African long-term insurers.

If qualified actuaries are involved in the audit process, it is in the interest of both the auditor and the qualified actuary to have a clear understanding of the roles and responsibilities of each party (refer to SAICA, 1998b:para. .26). An analysis and interpretation of collective responses to Question 163 indicated that the agreement between the auditors and the actuaries of the firm on the audit team should include the following salient features:

- A requirement to obtain proper approval of the allocation of the responsibility for the planning and performance of audit procedures between financial auditors (auditors who are not actuarial experts) and qualified actuaries involved in the audit.
- Format and content of the report by the qualified actuaries to the financial auditors.

Two respondents indicated in response to Question 163 that no explicit agreement between the financial auditors and the auditing firm's qualified actuaries involved in the audit is necessary, as the actuaries are an integral part of the audit team and process. Whereas the author appreciates this view, it is submitted that agreement on the matters mentioned in the previous paragraph should still be reached in these cases, although it might happen implicitly as part of the audit planning process.

It is clear from Table 6-1 that one respondent makes use of the services of a consulting actuary independent of the auditing firm as part of the overall audit strategy for insurance contracts and the related earnings. The decision as to whether such services are required as part of the audit is a matter of the auditor's

professional judgement (SAICA, 1998b:para. .50). Table 6-3, based on existing Canadian guidance (CICA, 1993:para. 14), contains an analysis of the respondents' views of the primary reasons for auditors of long-term insurers to make use of such consulting actuaries (Question 165). No data was available from the fourth respondent.

Table 6-3: Primary reasons for the use of independent consulting actuaries

Reason	No. of responses
Due to insufficient expertise, auditor requires assistance to understand highly technical areas of the actuarial valuation	3 and QR
Control environment over actuarial valuation process is weak resulting in increased risk of material misstatement of policy liabilities and the related earnings	2 and QR
Insurance client has a history of significant adjustments to prior period actuarial valuations	2 and QR
Insufficient information available from statutory actuary for audit purposes	1
Insurance client has liquidity or solvency problems	1
Auditor concerned about competence, objectivity or integrity of statutory actuary	1
Results of other audit procedures raise concern about reasonableness of valuation result	1
More cost effective to make use of local consulting actuaries than to make use of qualified actuaries employed by the international auditing firm	1

Table 6-3 is arranged in order of the level of support by respondents for each reason, measured by the number of respondents who indicated each reason in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that the first three items in Table 6-3 should definitely be considered as reasons for making use of a consulting actuary in the audit of insurance contracts and the related earnings of listed South African long-term insurers. The other reasons should, however, also be afforded consideration in specific circumstances.

Possible reasons for the smaller support for the last five items in Table 6-3 include:

- None of the respondents rely solely on the work of the statutory actuary on the audits on which they have gained their experience (refer to Table 6-1 and subsequent discussions). As a result, they have no experience of situations where insufficient information is available from the statutory actuary for audit purposes: these issues would be dealt with by the actuarial experts on their respective audit teams. Furthermore, as reliance is not placed solely on the work of the statutory actuary, increased risks of material misstatement resulting from

concerns about the competence, objectivity or integrity of the statutory actuary or about the reasonableness of the valuation result are also addressed by increasing the nature and extent of the work performed by the actuarial experts on their audit teams.

- Listed South African long-term insurers are historically not significantly exposed to going concern problems in the form of liquidity and solvency problems, due to, *inter alia*, regulation and regular review by the Financial Services Board (also refer to Chapter 1, Section 2.3.6: *Going concern risk*). Respondents therefore have limited experience of such cases.
- The respondent who indicated the last item in Table 6-3 interpreted the question in a slightly wider sense than the other respondents. For this response, (s)he assumed a situation where the auditor had already decided that actuarial expertise in addition to that currently being used on the audit is required. (S)he then indicated, in this particular scenario, the reasons for making use of consulting actuaries, as opposed to the logical alternative, namely qualified actuaries employed by the international auditing firm.

Table 6-4 contains an analysis of respondents' views on the matters that should be addressed in the engagement letter of independent consulting actuaries used as part of the overall audit strategy for insurance contracts and the related earnings (Question 166). No data was available from the fourth respondent.

Table 6-4: Contents of engagement letter of independent consulting actuary

Content	No. of responses
Nature and objectives of audit engagement	3 and QR
Nature and objectives of consulting actuaries' involvement	3 and QR
Materiality and risk considerations	3 and QR
Format and timing of communication between parties	3 and QR
Auditor's intended use of consulting actuaries' findings	3 and QR
Consulting actuaries' relationships with the audit client	3 and QR
Objectivity or independence requirements	3 and QR
Confidentiality requirements	3 and QR
Duty to exercise due care	3 and QR
Professional standards to be followed	3 and QR
Confirmation that consulting actuary is qualified to perform the work	3 and QR
Duty to make use of all available knowledge of the client	3 and QR
Access to client records	3 and QR
Consulting actuaries' duty to communicate all relevant information to auditor	3 and QR
Nature of source data	3 and QR
Responsibility for verification of source data	3 and QR
Methods and assumptions used by consulting actuaries and their authority	3 and QR
Responsibility regarding events subsequent to audit client's balance sheet date	3 and QR
Nature and content of consulting actuaries' report	3 and QR
Restrictions on use of auditor's or consulting actuaries' reports	3 and QR
Ownership of working papers	3 and QR
Nature and extent of auditor's review of consulting actuaries' work and findings, including access to consulting actuaries' working papers	3 and QR
Administrative matters (e.g. budgets and timing of work)	3 and QR
Purpose of consulting actuaries' report if not primarily for audit purposes	2

Table 6-4 is arranged in order of the level of support by respondents for each matter, measured by the number of respondents who indicated each matter in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that all the matters in Table 6-4, except the last, should definitely be included in the engagement letter of a consulting actuary on the audit of a listed South African long-term insurer. The last item in the table should be afforded significant consideration on the basis of its support by at least half the respondents, the latter including QR. With regard to the latter item, it is submitted that, in most cases, the primary purpose of the consulting actuaries' report would be the audit, although in some less common cases it might be also used for due diligence or other purposes or require publication in the annual report, in which case such uses should be agreed upon in the engagement letter.

5.3 Reliance on the work of an actuary

5.3.1 Introduction

This section contains an analysis, interpretation and discussion of responses to questions in the questionnaire contained in Appendix G relating to overall audit strategies in accordance with which the auditor relies on the work of an actuary for audit purposes.

The first subsection contains findings relating to all audits, regardless of which of the alternative overall audit strategies discussed in Section 5.2: *Actuarial expertise in the audit process* is employed on the audit (i.e. the actuarial expert could be the statutory actuary of the client, an actuary employed by the auditing firm or an independent consulting actuary).

The second subsection contains findings specifically relating to audit strategies in accordance with which the auditor relies on the work of the **statutory actuary** of the audit client as an actuarial expert (i.e. additional qualified actuaries employed or engaged by the auditor or engaged by the audit client are not relied upon).

5.3.2 Findings relating to all audits of listed South African long-term insurers

5.3.2.1 General

As was mentioned in Section 4: *Existing guidance relating to overall audit strategies*, various alternative overall audit strategies exist regarding the relationship between the auditor and the statutory actuary. Regardless of whether the overall audit strategy selected requires the auditor to place reliance on the work of the statutory actuary as an expert as defined in ISA 620 (IAASB, 2005) (but particularly in these cases and where the risk of material misstatement in the related areas is assessed to be high), the author believes that the auditor of a long-term insurer should assess certain aspects of the statutory actuary and his/her work, as the statutory actuary performs a vital management function within the long-term insurer (CICA, 1991:para. 15) and is therefore a critical part of the overall control environment and risk assessment process (refer to IAASB, 2005k:para. 43) of the insurer. The

American audit and accounting guide on life and health insurance entities furthermore indicates that, due to the complexity of the determination of policy liabilities (and, by implication, the related earnings) based upon actuarial principles and methods, the absence (and, by implication, incompetence, bias and lack of integrity) of proper actuarial involvement in making these management estimates may constitute a material weakness in internal control reportable to the audit committee (AICPA, 2003:para. 5.43).

All respondents and QR indicated that audit planning should involve enquiries from the statutory actuary **in his/her capacity as employee of the client** (Question 27), regardless of the overall audit strategy employed. This includes situations where the insurer does not have a qualified actuary as full-time employee, but engages a qualified actuary on a contract basis as statutory actuary, approved by the Registrar of Long-Term Insurance. Analysis and interpretation of collective responses to Question 28 indicated that enquiry should be made regarding the following areas relevant to the audit:

- Existence and nature of risks of material misstatements in the financial statements relating to actuarial issues.
- Changes in actuarial assumptions and methodology (supported by QR).
- Actuarial valuation bases for different product types and changes therein.
- Discussion of the valuation result.
- Discussion of the analysis of surplus (refer to Chapter 5, Section 6.3.2: *Underlying data*) (supported by QR).
- Discussion of checks or tests performed on the completeness and accuracy of valuation data (this item was not mentioned by respondents, but added by QR).

All respondents also indicated that these enquiries should be conducted by experienced auditors and actuarial experts (Question 29), which is indicative of the relative importance and complexity of such enquiries.

For the purpose of the remainder of this section, the term “actuarial expert” refers to any one or a combination of the experts discussed in Section 5.2: *Actuarial expertise in the audit process*, including, where relevant, the statutory actuary of the client.

The nature and extent of audit evidence required regarding the work and findings of the actuarial expert are determined by the auditor's assessment of the risk that the audit conclusion regarding the fair presentation of policy liabilities arising under insurance contracts and the related earnings may be inappropriate as a result of having relied upon the work of the expert (refer to CICA, 2002:para. .57). Table 6-5 contains an analysis of respondents' views in respect of the factors that the auditor should consider in assessing the risk of error in the work of the actuarial expert (Question 180). No data was available from the fourth respondent.

Table 6-5: Factors to consider when assessing risk of error in work of actuarial expert

Factor	No. of responses
Auditor's confidence in the competence and expertise of the expert	3 and QR
Objectivity and independence of the expert	3 and QR
Reputation of the expert	3 and QR
Previous experience with the expert	3 and QR
Perceived level of understanding by the expert of the auditor's objectives, standards and procedures	3 and QR
Ease of communication with the expert	3 and QR
Inherent risk of error in source data	2 and QR
Degree of co-operation of the expert with the auditor	2 and QR
Reasonableness of the findings of the expert in the light of the auditor's knowledge of the client and the findings of the audit	2 and QR
Sensitivity of the findings of the expert to changes in assumptions	2 and QR

Table 6-5 is arranged in order of the level of support by respondents for each factor, measured by the number of respondents who indicated each factor in his/her response, and includes input from QR.

If the actuarial experts are employed by the auditing firm, the quality of these experts may be assessed as part of the overall quality control processes of the auditing firm instead of on the particular audit engagement. Respondents were asked to include in their responses all factors that should be considered by the auditor in assessing the risk of error in the work of the actuarial expert, regardless of whether they are considered at auditing firm level or at the level of the specific audit.

On the basis of the majority view it can be concluded that all the factors in Table 6-5 should definitely be considered by the auditor of a South African long-term insurer in assessing the risk of error in the work of the actuarial expert.

Although most of the factors mentioned in Table 6-5 are self-explanatory, some are discussed in the following paragraphs due to their relative importance and complexity.

5.3.2.2 Competence and expertise of the actuarial expert

In assessing the competence and expertise of the actuarial expert (refer to Table 6-5 and also to the discussion of international auditing guidance in Section 4.1: *Existing international guidance*), the auditor should take into account factors such as:

- Membership in good standing of the ASSA (refer to CICA, 2002:para. .57(c) and the discussion of the requirements for membership of the ASSA in Section 2: *International and local profile of the actuary*). Should the actuarial expert also be the statutory actuary of the insurer, further evidence of competence exists in the form of a Practising Certificate that the ASSA requires every statutory actuary to possess (ASSA, 2004:para. 1.4). All qualified actuaries practising in South Africa are also bound by a code of professional conduct issued by the ASSA (ASSA, 2004:para. 1.4) and are required to have completed a professionalism course (Slattery, 2004:8).
- The experience and reputation of the actuary in the area in which the auditor places reliance on his/her work (refer to SAICA, 1998b:para. .08). Previous experience in working with the actuarial expert and the reputation of the expert are factors that should be taken into account in this regard.

It can be concluded from the discussion in the previous paragraph that evidence regarding the competence and expertise of the actuarial expert is relatively readily available in the South African environment. QR concurred with this conclusion.

5.3.2.3 Objectivity and independence of the actuarial expert

A more complicated factor for the auditor to assess is the objectivity and independence of the actuarial expert (refer to the discussion of international auditing guidance in Section 4.1: *Existing international guidance*).

If the actuarial expert has no relationship whatsoever with the audit client (i.e. in situations where the expert is employed by the auditing firm or engaged solely by the auditing firm), independence and objectivity should normally not be of significant concern to the auditor. However, situations where some kind of relationship exists between the actuarial expert and the audit client (e.g. where the auditor relies solely on the work of the statutory actuary of the client or the client has engaged an outside qualified actuary to perform the actuarial valuation or report on the actuarial valuation performed by the statutory actuary), the risk of error (including bias) in the work of the expert increases.

Research findings relating to objectivity and independence issues relating to overall audit strategies in accordance with which the auditor relies solely on the work of the statutory actuary are discussed in Section 5.3.3: *Findings relating to audits where the auditor relies on the work of the statutory actuary*.

In a situation where the audit client has engaged an outside qualified actuary to perform the actuarial valuation or to report on the actuarial valuation performed by the statutory actuary, the level of assurance that the auditor can obtain from reliance on the work of the outside actuarial expert is a matter of professional judgement. The implications for the audit of the fact that the outside actuarial expert in this scenario is not completely independent of the audit client due to the fact that (s)he was engaged by the client, together with any mitigating factors, should be taken into consideration in assessing the extent of audit assurance that can be obtained in this scenario. It is submitted that the extent of audit assurance in this scenario could be less than in a scenario where the auditor has engaged the outside actuarial expert. QR supported this view.

A specific risk relating to independence is the risk of the auditor auditing his/her own work in cases where the auditor provides consulting services to an audit client. The Sarbanes-Oxley Act recently introduced a prohibition on the auditor providing actuarial advisory services involving the determination of policy liabilities and the related accounts to listed audit clients in the United States of America (Telberg, 2000). No equivalent regulatory requirement currently exists in South Africa, rendering this risk very real in the South African environment. Some international auditing firms registered to perform audits in South Africa have in-house actuarial consulting arms (Deloitte Inc. in the United Kingdom, for example, merged its actuarial and insurance consulting practice with that of United Kingdom-based actuarial consulting firm Bacon and Woodrow in 2000 (AccountancyMagazine.com, 2000)). Auditors of South African long-term insurers should carefully consider the implications of the relevant local independence requirements and potential safeguards contained in the Codes of Professional Conduct of SAICA and the PAAB in this regard. A similar concern exists in Canada, where the regulatory regime in this regard is currently similar to that of South Africa (OSFI, 2001:7).

Requirements for the rotation of lead audit partners on the audits of listed clients were recently introduced in South Africa to improve auditor independence. An investigation of the potential for introducing similar requirements for the rotation of the actuarial expert is interesting to consider, but falls outside the scope of this research. The matter has, however, been included in Chapter 7, Section 2: *Areas identified for future research*.

5.3.2.4 Scope of the work of the actuarial expert

Existing local and international auditing guidance requires the auditor to obtain sufficient appropriate audit evidence that the scope of the work of the actuarial expert is sufficient for audit purposes (refer to the discussion of international auditing guidance in Section 4.1: *Existing international guidance*). This requirement is applied to the different alternative overall audit strategies discussed in Section 5.2: *Actuarial expertise in the audit process* as follows:

- Considerations relating to overall audit strategies in accordance with which the auditor relies on the work of the statutory actuary (in compliance with existing

local guidance) are discussed in Section 5.3.3: *Findings relating to audits where the auditor relies on the work of the statutory actuary*.

- Where the actuarial experts are **employed** by the auditing firm, the scope of their work is agreed on as part of the audit planning process, which should consequently render it sufficient and appropriate (supported by QR).
- Where reliance is placed on the work of independent consulting actuaries **engaged by the auditing firm**, the scope of their work is agreed upon in the engagement letter of the consulting actuaries (refer to Section 5.2: *Actuarial expertise in the audit process*), which should render it sufficient and appropriate for audit purposes (supported by QR).
- Where reliance is placed on the work of independent consulting actuaries **engaged by the insurer**, sufficiency and appropriateness of the scope of their work should be assessed with reference to the engagement letter between them and the insurer (supported by QR).

5.3.2.5 *Appropriateness of the work of the actuarial expert as audit evidence*

The auditor of a long-term insurer should also consider the appropriateness of the work of the actuarial expert as audit evidence (refer to the discussion of international auditing guidance in Section 4.1: *Existing international guidance*) and adjust the overall audit strategy accordingly should such work be found not to be appropriate. This judgement is required regardless of the relationship between the auditor and the actuarial expert.

Initial considerations during the planning phase of the audit, largely similar to those in Section 5.3.2.4: *Scope of the work of the actuarial expert*, are applicable. Appropriateness of the work of the actuarial expert for audit purposes should also be assessed during the review of the completed work of the expert, as is discussed in Section 5.3.2.6: *Review and conclusion of the audit*.

Table 6-6 contains an analysis of respondents' views on courses of action to be taken by the auditor should doubt be experienced about the sufficiency or

appropriateness as audit evidence of any aspect of the actuarial expert's work (Question 182).

Table 6-6: Courses of action: doubt about sufficiency or appropriateness of actuarial expert's work

Course of action	No. of responses
Additional enquiry from the actuarial expert	4 and QR
Use of a second actuarial expert	4 and QR
Review of working papers of actuarial expert	2 and QR
Examination of documentary evidence obtained by the actuarial expert	2 and QR
Reperformance of calculations of actuarial expert	2 and QR
Performance of additional analytical procedures: comparison of actuarial findings to related and/or industry information	1 and QR

Table 6-6 is arranged in order of the level of support by respondents for each course of action, measured by the number of respondents who indicated each course of action in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, all courses of action in Table 6-6, except the performance of additional analytical procedures, are definitely appropriate in cases where the auditor experiences doubt regarding the sufficiency or appropriateness of any significant aspect of the actuarial expert's work for audit purposes; and
- although only supported by a minority of respondents, the performance of additional analytical procedures should be afforded consideration by the auditor in this regard in specific circumstances. The reason for the smaller support for this course of action is that it is doubtful whether the analytical procedures as described would be sufficiently sensitive to identify potential material misstatements resulting from insufficient and/or inappropriate work of the actuarial expert.

The second actuarial expert referred to in Table 6-6 can include an independent consulting actuary, the engagement of whom is discussed in Section 5.2: *Actuarial expertise in the audit process*, and actuaries employed by the international auditing firm.

5.3.2.6 *Review and conclusion of the audit*

This section contains an analysis, interpretation and discussion of responses to questions in the questionnaire contained in Appendix G relating to the review and conclusion phases of the audit process in cases where the auditor relies on the work of an actuarial expert.

Upon completion of the work of the actuarial expert, the auditor should carefully review the report of the expert (or findings in another format) to conclude on the reasonableness and relevance of the findings (CICA, 2002:para. .61). Table 6-7 contains an analysis of respondents' views regarding the factors that should be considered by the auditor when reviewing the findings of the actuarial expert (Question 181).

Table 6-7: Factors to consider when reviewing findings of actuarial expert

Factor	No. of responses
Logical presentation of report with reference to agreed-upon scope of work	4 and QR
Compliance of findings with the record of understanding agreed upon between the auditor and the actuarial expert	4 and QR
Compatibility of findings with auditor's knowledge from the audit	4 and QR
Consistency of findings with any reviews of the actuarial expert's working papers by the auditor	4 and QR
Existence and implications for the audit and audit opinion of any qualifications and reservations in the findings of the actuarial expert	4 and QR
Impact of any restrictions on the use of the report of the actuarial expert on the audit	4 and QR
Proper references in report to auditor's objectives and criteria as agreed upon	2
Neutrality of tone of report	1

Table 6-7 is arranged in order of the level of support by respondents for each factor, measured by the number of respondents who indicated each factor in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, all factors except the last two in Table 6-7 should definitely be considered by the auditor when reviewing the findings of the actuarial expert;
- although only supported by a minority of respondents, the following factors should be afforded consideration by the auditor in this regard in specific circumstances:
 - Proper references in the report or findings to the auditor's objectives and criteria as agreed upon possibly received less support from respondents

due to the fact that the correlation between the agreed-upon objectives and criteria of the auditor and the findings of the actuarial expert is already encompassed largely by the first factor in Table 6-7, which received unanimous support from respondents.

- The neutrality of the tone used in the report is not important in all cases, but becomes important in cases where the auditor has reservations about the objectivity of the actuarial expert.

Table 6-8 contains an analysis of the views of respondents in respect of the circumstances in which the auditor should review the working papers of the actuarial expert (Question 183).

Table 6-8: Circumstances in which auditor should review working papers of actuarial expert

Circumstances	No. of responses
The working papers of the actuarial expert should always be reviewed by the auditor, but only to the extent that the auditor needs to understand and interpret the impact of the actuarial expert's findings on the financial statements	3 and QR
The working papers of the actuarial expert should always be comprehensively reviewed by the auditor	1
Only if the auditor experiences significant doubts about the completeness and appropriateness as audit evidence of the actuarial expert's work and findings that cannot be otherwise resolved (refer to Table 6-5 and the related discussions in this regard)	0

Table 6-8 is arranged in order of the level of support by respondents for each circumstance, measured by the number of respondents who indicated each circumstance in his/her response, and includes input from QR.

In his/her initial response, one respondent indicated that the working papers of the actuarial expert should only be reviewed if the auditor experiences significant doubts about the completeness and appropriateness as audit evidence of the actuarial expert's work and findings that cannot be otherwise resolved. In follow-up interviews this respondent did, however, indicate that (s)he believes it appropriate for the auditor to always review a summary of the work of the actuarial expert in the format of a detailed review memorandum comprising, for example, the risks of material misstatement identified by the expert, his/her response thereto and the resulting conclusions. This finding is interpreted to support the view that the working papers of

the actuarial expert should always be reviewed, but only to the extent necessary for the auditor to understand and interpret the impact of the findings on the financial statements. On this basis, this response was included in the first item in Table 6-8.

In interpreting the information in Table 6-8 it should be carefully borne in mind that, in an overall audit strategy in accordance with which the auditor relies on the work of in-house actuaries or independent consulting actuaries having reviewed the work of the statutory actuary, this implies reviewing the working papers of such in-house actuaries or consulting actuaries. In an overall audit strategy in accordance with which the auditor relies on the work of the statutory actuary (refer to Section 5.3.3: *Findings relating to audits where the auditor relies on the work of the statutory actuary*), it implies reviewing the working papers of the statutory actuary of the audit client.

On the basis of the majority view it can be concluded that the overall audit strategy for insurance contracts and the related earnings of listed South African long-term insurers should definitely always include a review by the auditor of the working papers of the actuarial expert, at least to the extent necessary for the auditor to understand and interpret the impact of the findings on the financial statements. Such review can comprise one or a combination of a physical review of hard copy and electronic documentation and verbal review by means of enquiry.

An analysis of respondents' views on the circumstances in which the use of a second actuarial expert, in addition to the one that (s)he originally intended to rely upon for audit purposes (initial expert), should be considered is contained in Table 6-9 (Question 184).

Table 6-9: Circumstances in which a second actuarial expert should be considered

Circumstances	No. of responses
Initial expert's findings are in conflict with those of the rest of the audit team	4 and QR
Disagreement between auditor and the initial expert regarding issues such as actuarial assumptions and valuation methods	4 and QR
Assessment by the auditor of exceptionally high significance and risk of error in initial actuarial expert's findings	2 and QR
Inadequate work or biased findings in initial expert's work (also refer to Table 6-6)	2 and QR
Auditor reviewed initial expert's working papers and found them highly technical and difficult to understand (refer to Table 6-8 and the related discussions in this regard)	1 and QR
Auditor found initial expert's report difficult to understand and interpret	1 and QR
Auditor had to reperform aspects of the initial expert's work	1
Disagreement between auditor and management	QR only

Table 6-9 is arranged in order of the level of support by respondents for each circumstance, measured by the number of respondents who indicated each circumstance in his/her response, and includes input from QR. It can be concluded that:

- on the basis of the majority view, the auditor of a listed South African long-term insurer should definitely consider the use of a second actuarial expert in the first four circumstances in Table 6-9;
- although only supported by a minority of respondents, the last four circumstances in the abovementioned table should be afforded consideration by the auditor in this regard in specific situations. Reasons for smaller support for these circumstances include:
 - As is evident from Section 5.2: *Actuarial expertise in the audit process*, all respondents held the view that it is not appropriate not to make use of an actuarial expert in the audit of a listed South African long-term insurer. The involvement of the actuarial expert is required, *inter alia*, due to the technical and other complexities of the actuarial valuation process. Therefore, as the auditor should select an appropriate initial expert with sufficient appropriate experience on audits of long-term insurers, it is unlikely that the auditor would experience difficulty reviewing his/her working papers and understanding his/her report.
 - For the same reason it is submitted that situations where the auditor regarded it necessary to reperform aspects of the initial expert's work should be extremely rare.

- Disagreements between the auditor and management of the insurer that cannot be resolved during the normal course of the audit are extremely rare occurrences in listed South African long-term insurers. They may be more prevalent in smaller, non-listed insurers, which is where the audit experience of QR has been gained, but which is not the main focus of this research.

The circumstances in which the auditor should consider the use of a second actuarial expert are expected to be rare. They are most prevalent in situations where the initial expert is employed by the insurer (refer to CICA, 2002:para. .69 and AICPA, 1994:para. .13). The second actuarial expert includes an independent consulting actuary, the engagement of whom is discussed in Section 5.2: *Actuarial expertise in the audit process*.

ISA 500: *Audit evidence* (IAASB, 2005b:para. 02) requires the auditor to obtain sufficient appropriate audit evidence supporting the audit opinion. Such evidence forms part of the working papers of the auditor. The importance of the sufficiency and appropriateness of such documentation relating to the involvement of an actuarial expert is highlighted by the fact that, in inspection reports recently issued by the American Public Company Accounting Oversight Board following their inspection of the work of two major auditing firms, deficiencies were reported in the documentation regarding the involvement of actuarial experts in the audit process (refer to PCAOB, 2004a:23 and PCAOB, 2004b:23-25).

Table 6-10 contains an analysis of respondents' views on the documentation regarding the use of an actuarial expert that should be included in the audit working papers (Question 185).

Table 6-10: Documentation to be included in audit working papers

Documentation	No. of responses
Important communications with the actuarial expert	4 and QR
Evidence of the assessment of the actuarial expert's competence, expertise, objectivity, independence and integrity	4 and QR
Description of the work performed by the actuarial expert	4 and QR
Description of work performed by the auditor on the work and findings of the actuarial expert, including any review of the working papers of the expert	4 and QR
Findings and report(s) of the actuarial expert	4 and QR
Evidence of the auditor's assessment of the relevance of the expert's findings to the objective of the engagement and the auditor's opinion	4 and QR
Reasons for selecting the particular audit strategy selected regarding the use of an actuarial expert	3 and QR
Role of the actuarial expert on the engagement	3 and QR
Reasons for making use of an actuarial expert	2 and QR
Reasons for selecting a particular actuarial expert	2 and QR

Table 6-10 is arranged in order of the level of support by respondents for each type of documentation, measured by the number of respondents who indicated each type of documentation in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that all documentation in Table 6-10 should definitely be included in the audit working papers of a listed South African long-term insurer. Reasons for the support of the last two items by a smaller majority of respondents include:

- As is evident from Section 5.2: *Actuarial expertise in the audit process*, all respondents felt strongly that it is not appropriate not to make use of an actuarial expert in the audit of a listed South African long-term insurer. It is therefore submitted that some respondents “assumed” that this involvement is not optional and therefore did not indicate that it is important to document the reasons for such involvement in the audit working papers.
- All respondents indicated in Table 6-10 that the audit working papers should contain evidence of the assessment of the competence, expertise, objectivity, independence and integrity of the actuarial expert. It is submitted that this assessment should implicitly provide sufficient reasons for selecting a particular person as the actuarial expert.

This section contained a discussion of the research findings relating to all audits of South African long-term insurers regarding reliance of the auditor on the work of an actuarial expert, regardless of the relationship between the auditor and the actuarial

expert. The research findings relating to situations where the auditor relies on the work of the statutory actuary for audit purposes are discussed in the next section.

5.3.3 *Findings relating to audits where the auditor relies on the work of the statutory actuary*

Whereas the contents of the previous section relate to reliance on all types of actuarial experts during the audit, this section contains research findings specifically relating to audit strategies in accordance with which the auditor relies on the work of the statutory actuary of the insurance client as an expert (i.e. additional qualified actuaries employed or engaged by the auditor are not used). The term “statutory actuary” in this section refers to situations where the statutory actuary is a full-time employee of the insurer and to situations where the insurer makes use of an approved outside qualified actuary in the role of statutory actuary (refer to Section 4.2: *Existing South African guidance* for a discussion of alternatives in this regard).

It should be noted that none of the relevant respondents employ this overall audit strategy on their selected clients and, in addition, none believe this audit strategy to be appropriate for listed South African long-term insurers (refer to Section 5.2: *Actuarial expertise in the audit process*). Respondents were nevertheless asked to answer a limited number of questions regarding this overall audit strategy, as it is currently still acceptable in terms of the existing guidance for auditors of South African long-term insurers and may also be appropriate in the audit of certain smaller, non-listed South African long-term insurers.

In overall audit strategies where the auditor places no direct reliance on the work of the statutory actuary, the contents of the following sections are largely irrelevant in the formulation of the overall audit strategy for insurance contracts and the related earnings, whereas the contents of Section 5.3.2: *Findings relating to all audits of listed South African long-term insurers* are applicable in such scenarios.

The following sections contain a discussion and analysis of responses relating to factors to be considered by the auditor to assess various aspects of the work of the

statutory actuary in a scenario where the auditor relies on the work of the statutory actuary of the insurance client as an expert.

5.3.3.1 Competence and expertise of the statutory actuary

Audit considerations regarding the competence and expertise of the statutory actuary are similar to those for any actuarial expert relied upon by the auditor, as was discussed in Section 5.3.2.2: *Competence and expertise of the actuarial expert*. An additional consideration supporting the competence and expertise of the statutory actuary in particular is the fact that his/her appointment as statutory actuary of the long-term insurer requires approval by the Registrar of Long-Term Insurance in accordance with Section 20(4) of the Long-Term Insurance Act, No. 52 of 1998 (South Africa, 1998a).

5.3.3.2 Objectivity and independence of the statutory actuary

Canadian legislation has always provided that the Chief Executive Officer and the Chief Operating Officer could not also serve as the statutory actuary of a Canadian long-term insurer. Amendments to this legislation in 1996 now also require that the roles of Chief Financial Officer and statutory actuary be segregated (OSFI, 2001:3). These requirements are intended to remove pressure (and, consequently, potential bias) from the actuary to meet profit targets and to segregate the duties of the valuation and the determination of profits to be released to shareholders in an attempt to introduce a measure of independence to the role of the statutory actuary.

A regulatory requirement of this nature provides the auditor with at least some assurance regarding the objectivity of the statutory actuary.

No such regulatory requirement currently exists in South Africa. In fact, PGN 106: *Actuaries and long-term insurance business in South Africa* (ASSA, 2004:para. 1.6) acknowledges that the statutory actuary of a South African long-term insurer may experience conflicting responsibilities arising from his/her appointment and remuneration by the insurer on the one hand and his/her responsibilities towards policyholders and the Registrar of Long-Term Insurance on the other. However, it

should be noted that, in a report following the investigation of Fedsure Life (refer to Chapter 1, Section 2.1: *The South African long-term insurance industry*), recommendations were made to the Financial Services Board to consider issuing guidelines in respect of directorships of statutory actuaries of South African long-term insurers (FSB, 2005:163).

These recommendations are still under consideration. In the light of the current strong focus on sound corporate governance in South Africa mentioned previously in this dissertation, it is submitted that, until such time as the abovementioned recommendations are implemented, sound corporate governance principles in this regard are not necessarily being followed by South African long-term insurers.

As was discussed in Section 3.3: *The statutory actuary*, the statutory responsibilities of the statutory actuary in South Africa extend only to the returns of the long-term insurer to the Registrar of Long-Term Insurance, and not to the financial statements of the insurer.

The PGNs issued by the ASSA extend these responsibilities to include a report in the financial statements on the financial strength and profitability of the long-term insurer (refer to Section 3.3: *The statutory actuary*). However, the board of directors of the insurer, and not the Registrar of Long-Term Insurers, appoints the actuary for reporting in the financial statements of the insurer. Although in practice these two roles are normally consolidated into one person, it is possible that the objectivity of the statutory actuary for reporting in the financial statements can be influenced by the board of directors in such ways as participation in profit-based incentive bonus schemes (Von Wielligh, 2001a:9).

This situation results in the risk of fraud or error due to the bias of the statutory actuary being higher in the current South African environment than in, for example, the Canadian long-term insurance industry.

In mitigation of the above, the statutory actuary of a South African long-term insurer is required to remain objective and manage any conflicts of interest appropriately in

accordance with the *Guide to Professional Conduct* issued by the ASSA (ASSA, 2004:para. 2.8), which could provide some assurance to the auditor.

Furthermore, the existence of an effective actuarial subcommittee of the board of directors, comprising independent non-executive directors with sufficient actuarial knowledge and expertise and overseeing the functions of the statutory actuary, may further mitigate the abovementioned risks (Von Wielligh, 2001b:13). In a report following the investigation of Fedsure Life (refer to Chapter 1, Section 2.1: *The South African long-term insurance industry*), recommendations were made to the Financial Services Board with regard to such committees (FSB, 2005:163). They are, however, still under consideration and have not been implemented.

In deciding on the degree of reliance that can be placed on the objectivity and independence of the statutory actuary, the auditor of a South African long-term insurer should be mindful of the relationship between the insurer and the statutory actuary. A degree of independence may, for example, be introduced by the insurer contracting a consulting actuary as statutory actuary instead of appointing an employee in this position, as was discussed in Section 5.3.2.3: *Objectivity and independence of the actuarial expert*. Conversely, the fact that the statutory actuary in the latter situation is not involved with the day-to-day operations of the insurer may impair his/her knowledge of the business of the insurer, increasing the inherent risk of inappropriateness of, for example, actuarial assumptions for the particular business.

5.3.3.3 *Scope of the work of the statutory actuary*

Consideration of the sufficiency of the scope of the work of the statutory actuary is of particular importance in the overall audit strategy for insurance contracts and the related earnings. By obtaining a proper understanding of the design, implementation and monitoring of the actuarial valuation process and controls, including controls over source data and assumptions (refer to Chapter 5, Section 4: *Findings relating to business and accounting processes and the related internal controls of the client*), the auditor can often conclude whether the work performed by the statutory actuary

during the valuation process is at least as extensive as the work that the auditor would have performed in such circumstances (Von Wielligh, 2001b:13).

According to Practice Note 20: *The audit of insurers in the United Kingdom* (APB, 1999:SAS520.9), the statutory actuary should normally not place any reliance regarding the adequacy of the source data used in the actuarial valuation on audit work performed during the normal course of the audit of a long-term insurer in the United Kingdom. Should such reliance be required, it should be the subject matter of a separate audit engagement. In the South African context, however, two of the four respondents indicated that such reliance is justified (Question 170). Another respondent and QR indicated that it is only justified if specifically agreed upon between the auditor and the statutory actuary as an agreed-upon procedures engagement. The minority view (one respondent) was that the statutory actuary should rely on the internal controls and the results of testing thereof by the internal audit function for assurance over the source data.

On the basis of the abovementioned findings it can be concluded that auditors of listed South African long-term insurers can provide assurance to the statutory actuary of South African long-term insurers on the adequacy of source data used in the actuarial valuation. As the risks involved in providing specific audit assurance on source data (and therefore the scope of the audit work) may be different to those involved in an audit of the financial statements as a whole, the necessity for a separate engagement letter describing, *inter alia*, the extent of assurance provided by the auditor and the exact data on which such assurance is provided, should be considered by the auditor.

Two respondents also indicated that, other than on source data, the statutory actuary should be allowed to rely on the results of audit work regarding components of the financial statements not affected by the actuarial valuation (e.g. investments), whereas the other two respondents indicated that this reliance is not appropriate (Question 171). It is submitted that the respondents' reasons for the views expressed relating to reliance of the actuary on the work of the auditor in respect of source data discussed in the previous paragraphs are largely also applicable to reliance regarding other financial statement components.

On the basis of this it can be concluded that auditors of listed South African long-term insurers can provide assurance to the statutory actuary of South African long-term insurers on components of the financial statements not affected by the actuarial valuation. As the risks involved in providing specific audit assurance on components of the financial statements not affected by the actuarial valuation (and therefore the scope of the audit work) may be different to those involved in an audit of the financial statements as a whole, the necessity for a separate engagement letter describing, *inter alia*, the extent of assurance provided by the auditor and the exact components on which such assurance is provided, should be considered by the auditor.

5.3.3.4 *Appropriateness of the work of the statutory actuary as audit evidence*

To properly assess the appropriateness of the work of the statutory actuary as audit evidence (refer to the discussion of international auditing guidance in Section 4.1: *Existing international guidance*), the auditor needs to consider a number of factors, including (Von Wielligh, 2001b:13):

- integrity of the source data used in the valuation process, and the related accounting information;
- appropriateness and consistency over time and inherently of actuarial assumptions;
- appropriateness of valuation methods; and
- consistency of the valuation results with the auditor's knowledge of the business and the results of other audit procedures.

Audit evidence in this regard often includes documentation prepared by or with significant input of the statutory actuary and his/her department. A review of this documentation should provide the auditor of a South African long-term insurer with some evidence regarding the appropriateness of the work of the statutory actuary as audit evidence. Table 6-11 contains an analysis of respondents' views on the documentation produced by the audit client solely by or with significant input from its actuarial department, which can be used for audit purposes (Question 176):

Table 6-11: Actuarial documentation useful for audit purposes

Documentation	No. of responses
Selection of assumptions	4 and QR
Selection of valuation methods	4 and QR
Materiality guidelines	4 and QR
Description of the effects of using approximations in the valuation process (e.g. grouping of similar contracts into “clusters” or “valuation cells” for valuation) (refer to Chapter 5, Section 6.6: <i>Actuarial calculations</i>)	4 and QR
Verification of source data used in the valuation	4 and QR
Validation of actuarial calculations	4 and QR
Description of reliance on the work of others during the actuarial valuation process	4 and QR
Validation of the reasonableness of the valuation result	4 and QR
Valuation report issued by the statutory actuary to the board of directors of the insurer	4 and QR
Letter of appointment of statutory actuary by insurer	3 and QR

Table 6-11 is arranged in order of the level of support by respondents for each type of documentation, measured by the number of respondents who indicated each type of documentation in his/her response, and includes input from QR. On the basis of the majority view it can be concluded that all documentation in Table 6-11 should definitely be considered useful for audit purposes in the audit of a listed South African long-term insurer.

The auditor should be satisfied that such documentation produced by the statutory actuary constitutes sufficient appropriate audit evidence, as is the case with any audit working papers supporting the audit opinion.

Should the auditor conclude that the work of the statutory actuary upon which (s)he intended to rely is not sufficient or appropriate as audit evidence, the courses of action to be taken by the auditor are similar to those discussed in Section 5.3.2.5: *Appropriateness of the work of the actuarial expert as audit evidence*.

5.3.3.5 Communication between the auditor and the statutory actuary

Both the auditor and the statutory actuary have access to confidential information during the course of the performance of their respective duties and both parties have a duty of confidentiality in this regard (SAICA, 1998b:para. .24). The majority of respondents (three of the four) and QR indicated that the auditor should have

permission from management to communicate with the statutory actuary and, when necessary, to disclose any relevant information to him/her (Question 167). Such permission should be obtained prior to the acceptance of the audit engagement and the engagement should be refused if such permission is not granted (refer to, *inter alia*, AARF, 2002a:para. .14 and SAICA, 1998b:para. .25). It is submitted that, where the statutory actuary is a full-time employee of the insurer, such permission may be implicit in the auditor's right to communicate with management in general as part of the audit process.

To facilitate a clear understanding of the responsibilities of each of the abovementioned parties during the audit process and the timing and scope of their work and to formalise communication between the two parties (refer to, *inter alia*, AARF, 2002a:para. .12), a formal record of understanding or terms of reference may be agreed upon between the parties. Note that, in this situation in which the auditor relies on the work of the statutory actuary as the actuarial expert, no engagement letter exists between the auditor and the statutory actuary. This situation is different from the one relating to the appointment of independent consulting actuaries discussed in Table 6-4.

None of the countries whose existing guidance was reviewed (refer to Chapter 2, Section 5.3: *Literature review*) requires the abovementioned agreement to be in writing. All respondents in this research and QR nevertheless indicated that such agreement should be required and should be in writing and signed by both parties in the audit of a listed South African long-term insurer (Question 168).

Table 6-12 contains an analysis of respondents' views on the matters to be covered in the record of understanding or terms of reference agreed upon between the auditor and the statutory actuary (Question 169).

Table 6-12: Matters to be covered in record of understanding or terms of reference

Matter	No. of responses
Roles and responsibilities of each party	4 and QR
Confirmation of approval of appointment of the statutory actuary by the Registrar of Long-Term Insurance	4 and QR
Scope of the work of each party	4 and QR
Intended use of the work of the other party	4 and QR
Right to communicate to third parties the identity of the statutory actuary and the extent of his/her involvement	4 and QR
Clarification of the relationship of the statutory actuary with the audit client (including any conflicts of interest)	4 and QR
Confidentiality of client information	4 and QR
Relevant standards to be applied by each party (e.g. International Auditing Standards and Professional Guidance Notes)	4 and QR
Timing of work to be performed by each party	4 and QR
Format and timing of communication between parties (also refer to Table 6-14)	3 and QR

Table 6-12 is arranged in order of the level of support by respondents for each matter, measured by the number of respondents who indicated each matter in his/her response, and includes input from QR. On the basis of these findings it can be concluded that the record of understanding between the auditor and the statutory actuary in the audit of a listed South African long-term insurer should definitely cover all matters in Table 6-12. Such record of understanding may be included in the engagement letter of the auditor.

Communication between the auditor and the statutory actuary should be established at the planning stage of the audit and maintained thereafter throughout the execution and conclusion phases of the audit (refer to CICA, 1991:para.04 and SAICA, 1998b:para. .23). All respondents and QR supported the existing guidance by indicating that the first meeting with the statutory actuary as expert should take place during the planning phase of the audit, and in particular during understanding (changes in) the business of the client and obtaining or updating the auditor's understanding of the accounting systems and related internal controls of the client (Question 173).

Table 6-13 contains an analysis of respondents' views on the matters that should be discussed with the statutory actuary as expert during the planning phase of the audit (Question 174).

Table 6-13: Matters to be discussed with statutory actuary during audit planning

Matter	No. of responses
Confirmation of formal appointments of auditor and statutory actuary	4 and QR
Confirmation of professional qualifications of both parties	4 and QR
Professional standards to be applied by both parties	4 and QR
Context in which the auditor intends to rely upon the work of the statutory actuary	4 and QR
Definitions and application of specific concepts underlying the professional standards of each profession	3 and QR
Nature of the work to be performed by the auditor	3 and QR
Specific work of the statutory actuary that the auditor intends to rely upon	3 and QR
Specific work of the auditor that the statutory actuary intends to rely upon	3 and QR
Responsibility for the verification of source data used in the actuarial valuation	3 and QR
Timing of the work to be performed by each party	3 and QR
Reporting deadlines	3 and QR
Materiality	3 and QR
Responsibility for monitoring of events subsequent to the balance sheet date	3 and QR
Significant areas of disagreement between management and the statutory actuary	QR only

Table 6-13 is arranged in order of the level of support by respondents for each matter, measured by the number of respondents who indicated each matter in his/her response, and includes input from QR. On the basis of these findings it can be concluded that all matters in Table 6-13, except major areas of disagreement between management and the statutory actuary, should definitely be discussed by the auditor with the statutory actuary during the planning phase of the audits of listed South African long-term insurers. The latter matter should also be afforded consideration by the auditor in this regard in specific circumstances.

As was discussed in Section 4.2: *Existing South African guidance*, the statutory actuaries of the larger South African long-term insurers are mostly full-time employees and, by implication, members of the management of the company. In these cases, no disagreement can exist between management and the statutory actuary, as the statutory actuary is a member of management. In smaller, non-listed insurers (on which the experience of QR was gained), however, the statutory actuary is sometimes not a full-time employee of the insurer, resulting in the potential for such disagreements. This explains the addition of this matter by QR. It is submitted that it will rarely be applicable to listed South African long-term insurers.

With regard to communication between the parties during the phases of the audit subsequent to planning, respondents indicated that the following matters should be

discussed by the auditor with the statutory actuary as expert and documented as such in the audit working papers (the number of respondents who indicated each matter appears in brackets after the matter and includes input from QR) (Question 175):

- Departures from approaches or strategies agreed upon between the auditor and the statutory actuary during the planning phase of the audit (4 and QR).
- Any unforeseen circumstances encountered by either party that could have a significant impact on the financial statements (4 and QR).
- Any weaknesses in internal controls that could result in a material misstatement in the financial statements (4 and QR).
- The discovery of fraud or errors that could have a material impact on the financial statements (4 and QR).

On the basis of these findings it can be concluded that all the abovementioned matters should definitely be discussed by the auditor with the statutory actuary as expert and properly documented in the audit working papers during phases subsequent to the planning of the audit of listed South African long-term insurers.

Respondents were asked to arrange the typical steps in the communication process between the auditor and the statutory actuary during the reporting phase of the audit in the order in which they should occur (Question 177). Table 6-14 contains an analysis of responses in this regard.

Table 6-14: Order of communication between auditor and statutory actuary

Step	Responses			
	1	2	3	4
1. Auditor sends report to statutory actuary with results of audit procedures on which actuary relies	3	1	1	1
2. Statutory actuary sends report with valuation results to auditor	2	2	2	2
3. Statutory actuary issues report to management and report to be included in the annual report	1	3	3	3
4. Auditor issues audit report on financial statements	4	5	4	5
5. Statutory actuary reports to the Financial Services Board	*	4	5	4
Key:				
1 = First step up to 5 = last step				
* = Not regarded as applicable for this research				

Respondent 1 in Table 6-14 indicated that reporting by the statutory actuary to the Financial Services Board is not a step in the reporting process applicable to expressing an audit opinion on policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers. It is only applicable to the expression of an audit opinion on the statutory return of the insurer to the Financial Services Board (refer to Chapter 2, Section 5.6.1: *Audit opinions on regulatory returns*) and therefore falls outside the scope of this research. The author concurs with this view.

On the basis of the majority view it can be concluded that the order of communication between the auditor and the statutory actuary in the audit of listed South African long-term insurers should normally be as follows:

1. The auditor sends a report to the statutory actuary with the results of audit procedures on which the actuary relies (if applicable).
2. The statutory actuary sends a report with the valuation results to the auditor.
3. The statutory actuary issues a report to management and the report to be included in the annual report.
4. The auditor issues the audit report on the financial statements.

QR supported this conclusion.

The abovementioned proposed order is, however, potentially affected by the extent of reliance by the statutory actuary on the work of the auditor and *vice versa*, as agreed upon between these parties. It is therefore proposed that the order of these two steps in the communication process be specifically agreed upon between the auditor and the statutory actuary during the planning phase of the audit and included in the record of understanding or terms of reference, the proposed content of which is included in Table 6-12. QR supports this proposal.

Chapter 5, Section 6.9.1: *Management representations* contains a description of the importance of management representations relating to policy liabilities arising under insurance contracts and the related earnings in the audit of these components. The existing American (AICPA, 2003:para. 5.46) and Canadian guidance (CICA,

1993:para. 37) requires the auditor to obtain a written representation from the statutory actuary including a summary of the significant elements of the actuarial valuation, regardless of the auditor's assessment of the risk of material misstatement in the results of the actuarial valuation.

All respondents and QR indicated that, in the South African environment, these representations should be obtained from the general management (typically the board of directors) of the company, rather than solely from the statutory actuary (Questions 178 and 179), although they should include specific representations regarding subject matter for which the statutory actuary takes responsibility. As the board of directors is ultimately responsible for the fair presentation of policy liabilities and the related earnings in the financial statements and possibly has access to a broader range of information than the statutory actuary, the author agrees with the views of the respondents, provided that the board of directors has obtained and properly considered input from the statutory actuary in making such representations.

5.4 Conclusion

The integration of actuarial expertise into the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings is a complex issue that requires careful consideration of the risks of material misstatement involved and the exercise of sound professional judgement by the auditor.

Various alternative overall audit strategies can be employed in this regard, ranging from reliance by the auditor solely on the work of the statutory actuary (not supported on the basis of the findings of this research, but currently allowed by existing South African auditing guidance), to the involvement of and reliance on the work of a consulting actuary independent of both the auditor and the insurance client, but engaged by the auditor.

If reliance is to be placed on the statutory actuary, (s)he in fact becomes a specialist member of the audit team. QR concurred with this view. This raises an important question, namely whether the auditor would ever be able to use client staff as *ad hoc* audit team members without loss of objectivity and independence.

One other situation where this does occur is where the external auditor relies on the work performed by internal auditors. In this situation, the external auditor performs extensive reviews of the work of the internal auditor and other procedures to assess the quality of and objectivity with which the internal audit work was performed (refer to IAASB, 2005f). It is therefore reasonable to expect the external auditor of a listed South African long-term insurer to perform procedures of a similar nature and extent to support reliance on the work of the statutory actuary for audit purposes. The author believes that few, if any, auditors of listed South African long-term insurers possess the required actuarial knowledge, expertise and experience to perform such procedures. Consequently, it is suggested that such audit strategy be disallowed for listed South African long-term insurers.

The next section contains a discussion of the pitfalls and problems in respect of the incorporation of actuarial expertise into the audit process that have been encountered by auditors of listed South African long-term insurers in the past, some of which are still being encountered. Where possible, suggestions for ways to address these areas are made.

6. PITFALLS AND PROBLEMS

6.1 Introduction

Each of the alternative overall audit strategies for policy liabilities arising under insurance contracts and the related earnings requires some extent of co-operation between the auditor, the statutory actuary and (where applicable) any other actuarial experts involved in the audit. Certain pitfalls and problems may be encountered as a result of, *inter alia*, the involvement of two distinctly different professions with different roles and responsibilities in the audit process. This section contains an analysis, interpretation and discussion of respondents' views on these pitfalls and problems, as well as suggestions for addressing these issues. Most of the pitfalls and problems encountered appear to be generic across all alternative overall audit strategies.

6.2 Research findings

Respondents were asked to indicate which challenges and problems they are **currently** experiencing regarding the audit of policy liabilities arising under insurance contracts and the related earnings (Question 222). They were also asked to indicate which challenges and problems in this regard experienced by them **in the past** have subsequently been resolved (Question 223). Table 6-15 contains an analysis of their responses. No data was available from the fourth respondent regarding problems currently being experienced, but data was available regarding problems experienced in the past but since resolved.

Table 6-15: Challenges and problems experienced by auditors

Challenge or problem	No. of responses	
	Currently experienced	Experienced in past but resolved
Lack of experience of audit staff	3	-
Complexity of actuarial valuation process	3	1
Improper project management by auditor or client's actuarial department	1	-
Unwarranted reliance on the work of the statutory actuary	1	1
Appropriateness of the work of the statutory actuary as audit evidence	-	1
Strained relationship between the auditing and actuarial professions	-	1

Follow-up interviews with some respondents indicated that the problems experienced in the past but since resolved in Table 6-15 were resolved largely by the inclusion of an appropriate actuarial expert in the audit team (refer to Chapter 5, Section 9.2: *Changes in overall audit strategies since 1998*).

The remainder of this section contains a discussion of each of the challenges and problems mentioned in Table 6-15 and proposed solutions for each challenge or problem.

6.2.1 *Lack of experience of audit staff and complexity of actuarial valuation process*

The complexity of the actuarial valuation process is discussed in Chapter 1, Section 2.3.3: *Complexity of the actuarial valuation process*. This complexity

inherent in the audit of a listed South African long-term insurer is compounded by a number of other factors discussed in Chapter 1: *Introduction and background*, including:

- complexity of accounting for and presentation of long-term insurance activities, including significant recent and expected future changes in available financial reporting guidance for South African long-term insurers;
- complexity of the application of the concept of materiality in the audit of a long-term insurer; and
- extent of availability of sufficient, appropriate audit evidence and complexity thereof.

Auditors, particularly less experienced audit staff, often do not have the technical background or experience to assess many of the complex actuarial issues encountered during the course of the audit, such as:

- the appropriateness and consistency over time and inherently of actuarial assumptions; and
- the appropriateness of primary valuation methods, for example prospective and retrospective valuation methods employed for different types of insurance contracts (Von Wielligh, 2001b:13).

Suggested solutions for this problem include:

- Industry specialisation of audit staff working on long-term insurance clients at the appropriate point in their careers in the auditing profession (also supported by QR). It is recommended that a proper balance should be attained between general auditing experience, auditing experience in the financial services industry and auditing experience specifically in the long-term insurance industry.
- Extensive industry-specific training of audit staff working on long-term insurance clients (refer to Chapter 5, Section 2.4: *Composition and profile of audit teams* for an indication of current training profiles of respondents' audit teams). Given the complex nature of the industry and audits of clients in the industry, training should be most effective if delivered on a "just-in-time" basis to enable staff to practically apply their learning soon after the training event on an audit, and should include extensive on-the-job training (also supported by QR).

- Involvement of qualified actuaries employed by the auditing firm and trained and experienced in, at a minimum, the basic principles of auditing, in the audit process. These actuaries can “speak the languages” of both the auditing and actuarial professions and should be able to explain complex actuarial matters to the auditor within the auditor’s frame of reference (Von Wielligh, 2001c:9) (also supported by QR).

6.2.2 *Improper project management*

The audit of policy liabilities arising under insurance contracts and the related earnings of a listed South African long-term insurer with a diversified range of complex products is a daunting task that requires efficient and effective project management by the audit team as well as the statutory actuary and his/her department. The fact that the audit often takes place while the valuation results are still being compiled, finalised and reported, increases the pressure on the audit team and the actuarial department of the insurer (Von Wielligh, 2001c:8).

The appointment of two dedicated project managers for the audit of these areas, one by the audit team and one by the statutory actuary, should facilitate regular liaison between auditor and client and minimise disruptions in the audit process and actuarial department.

6.2.3 *Unwarranted reliance on the work of the statutory actuary*

The complexity of the actuarial valuation process and the audit thereof, as discussed in Section 6.2.1: *Lack of experience of audit staff and complexity of actuarial valuation process*, combined with the complexities of the relationship between the auditing and actuarial professions, can result in expectation gaps between the auditor and the statutory actuary regarding the work of the other party that can be relied upon (Von Wielligh, 2001c:8). From the auditor’s point of view, the result may be unwarranted reliance by the auditor on elements of the work of the statutory actuary. An example is the unwarranted assumption by the auditor that the statutory actuary has tested the validity, accuracy and completeness of certain financial source data,

whereas the actuary might not have done so as a result of an expectation that (s)he could rely upon the work of the auditor in this regard.

A formal record of understanding or terms of reference between the auditor and the statutory actuary agreed upon during the planning phase of the audit (refer to Section 5.3.3.5: *Communication between the auditor and the statutory actuary*) should prevent unwarranted reliance by these two parties on the work of each other. QR supported this proposal.

6.2.4 *Appropriateness of the work of the statutory actuary*

Assessment of the appropriateness of the work of the statutory actuary as audit evidence is discussed in detail in Section 5.3.3.4: *Appropriateness of the work of the statutory actuary as audit evidence*. Further discussions in this regard, including the suggested actions to be taken by the auditor should the work of the statutory actuary be deemed to be inappropriate as audit evidence, are contained in Section 5.3.2.5: *Appropriateness of the work of the actuarial expert as audit evidence*.

6.2.5 *Strained relationship between professions*

As can be expected of many relationships between two different professions, each with its own professional bodies, requirements and mindsets, the relationship between the auditor and the qualified actuary is a sensitive one. The relationship is potentially further strained by the use of different terminology by the two professions (Von Wielligh, 2001c:8).

This problem was particularly prevalent during the period after the SAAS 620 (PAAB, 1998) was issued, resulting in the need for auditors to become involved in what was previously the almost exclusive domain of the actuary (refer to Section 3.2: *The auditor*). Table 6-15 clearly shows that, although one respondent previously experienced this problem, it is no longer experienced by any of the respondents. This indicates that the relationship between the two professions has improved since the introduction of SAAS 620 (PAAB, 1998).

The author believes that this relationship can be improved by building mutual trust and respect between the two professions. Particularly in the period after SAAS 620 (PAAB, 1998) was issued, auditors should have been sensitive to the fact that actuarial departments were not accustomed to being subjected to an audit.

The auditor should also explain and demonstrate the value of an audit to the statutory actuary to build the abovementioned trust and respect. An example of such value is a report to the statutory actuary on weaknesses in controls over the integrity of source data used in the actuarial valuation and suggestions for improvement of these controls, which should result in a more reliable valuation result.

The involvement of qualified actuaries employed by the auditing firm and/or independent consulting actuaries engaged by the auditing firm in the audit of the actuarial valuation can also improve the relationship as discussed in Section 6.2.1: *Lack of experience of audit staff and complexity of actuarial valuation process*.

Given the importance of the relationship between the auditor, the statutory actuary and the person(s) providing actuarial expertise in the audit process, it is also recommended that the education and training of actuaries locally and internationally should include the necessary elements to facilitate an understanding of the objectives and work of the auditor to prevent any potential strain between the two professions during the audit process.

6.3 Conclusion

Some of the pitfalls and problems experienced by auditors in the years soon after SAAS 620 (PAAB, 1998) was issued have since been resolved by the application of some of the suggestions discussed above. However, it is evident from the analysis of responses that some significant challenges still remain for auditors in the audit of policy liabilities arising under insurance contracts and the related earnings.

Many of the suggestions made to address these challenges entail the involvement of a qualified actuary other than the statutory actuary of the insurance client in the audit of a long-term insurer. In addition to being valuable to the auditor, Von Wielligh (2001c:9) is of the view that this involvement can result in significant benefits for the audit client, including:

- a knowledgeable, objective and professional expert view of the actuarial operations by a person who can act as a sounding board for the statutory actuary; and
- management letters relating to internal controls and other matters regarding the actuarial department of the client can incorporate local and international benchmarks and best practices to improve the operations of the department.

7. OVERALL CONCLUSION

The incorporation of actuarial expertise into the overall audit strategy for insurance contracts and the related earnings requires a number of complex decisions to be made by the auditor. Various different alternatives exist, each with its own benefits, disadvantages and risks.

The selection and application of the appropriate alternative requires sound professional judgement to be exercised by the auditor. The guidance developed in this chapter from existing international and local guidance combined with the experience of auditors experienced in the application of such judgement, makes a significant contribution to existing knowledge and should assist auditors to better support the application of their professional judgement in this regard in future.

A number of interesting issues and perspectives were identified in this chapter, including:

- The importance of co-operation between the auditor and the actuary to ensure an effective and efficient audit of a listed South African long-term insurer.
- Alternative possible audit strategies to be employed for the incorporation of actuarial expertise into overall audit strategies for listed South African long-term insurers.

- A clear finding that it is not appropriate for the auditor of a listed South African long-term insurer to rely solely on the work of the statutory actuary as an actuarial expert in the audit of insurance contracts and the related earnings, resulting in a recommendation to revise existing guidance to remove such possibility.
- The concept of rotation of the actuarial expert involved in the audit to improve independence.
- A recommendation regarding the extent of review by the auditor of the working papers of the actuarial expert.
- Recommendations regarding the training of audit staff and qualified actuaries involved in the audits of listed South African long-term insurers.

The next and final chapter contains a summary of the research results and a final conclusion of the research.

CHAPTER 7
SUMMARY AND CONCLUSION

	Page
1. SUMMARY	331
2. AREAS IDENTIFIED FOR FUTURE RESEARCH	337
3. CONCLUSION	339

1. SUMMARY

The South African long-term insurance industry is currently at an important crossroads in its existence. The industry is haunted by concerns about high cost structures, a lack of transparency in disclosure to policyholders, unfulfilled expectations of policyholders and the proliferation of available investment vehicles in the market. These concerns are exerting pressure on existing products and practices of South African long-term insurers.

The audits of these insurers are of a complex and high-risk nature as a result of the complexity of their operations and, in particular, the highly complex actuarial valuation process in respect of policy liabilities. The prevailing auditing standards in South Africa require auditors to include policy liabilities in the ambit of their audit opinions.

Recent investigations into failed long-term insurers and their audits, including that of local Fedsure Life, British Equitable Life Assurance Society and Australian HIH Insurance, demonstrate the high risk involved in the audits of long-term insurers.

Against this background, the objective of this research, as elaborated on in Chapter 2: *Research objective, design, method and scope*, was to develop a best practice framework for the formulation of effective and efficient overall audit strategies for policy liabilities arising under insurance contracts and the related earnings of listed South African long-term insurers.

Although overall audit strategies are client-specific, best practices in this regard were researched on the basis of the views of experienced auditors. These views were combined into a generic framework from which client-specific overall audit strategies can be customised. This framework is documented in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

To justify the focus of the research on policy liabilities arising under insurance contracts and the related earnings, a review of existing literature relating to areas

such as local and international guidance for auditors on the audit of long-term insurers and various aspects of the concept of inherent risk was undertaken. Taking into account the knowledge gained from this review, a questionnaire was developed and sent to auditors of all listed South African long-term insurers for completion. The questionnaire required respondents to assess inherent risk for the assertions relevant to various long-term insurance industry-specific account balances and classes of transactions.

Responses were received from eight of the nine potential respondents. Responses were processed to calculate a Relative Inherent Risk Index that was used to rank the various account balances and classes of transactions on the basis of their exposure to inherent risk relative to each other. This process, described in detail in Chapter 3: *High inherent risk elements in financial statements of listed South African long-term insurers*, provided significant support for the hypotheses that policy liabilities and the related earnings are the industry-specific items in the financial statements of listed South African long-term insurers potentially exposed to the highest relative levels of inherent risk.

The concept of a Relative Inherent Risk Index as developed in this research can be usefully applied by auditors in all industries. The index may be used as a helpful tool in the proper allocation of the audit budget and audit staff among the various elements of the audit.

A summarised version of the research described in the preceding paragraphs was published in the accredited academic journal *Meditari Accountancy Research*. This article appears in Appendix A. The article is included in this appendix as it provides the basis for Chapter 3: *High inherent risk industry-specific elements in financial statements of listed South African long-term insurers*.

On the basis of a review of existing literature relating to various types of research methods, standardised questionnaires were selected as the most appropriate method of data collection for the remainder of the research, the objective of which was the development of a best practice framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related

earnings. As no such questionnaire existed prior to this research, it was developed specifically for this research on the basis of an extensive review of existing local and international guidance for auditors in general, as well as specifically auditors of long-term insurers, combined with the author's previous practical experience in this field. The development of the questionnaire was the first step in the development of the abovementioned framework for the formulation of overall audit strategies and, as such, made a significant contribution to existing knowledge in this area.

The questionnaire was sent to experienced auditors responsible for the audits of the five largest listed South African long-term insurers, representing 79% of the premium income and 88% of the total assets of the industry and 95% of the embedded value of the total of nine long-term insurers listed on the JSE Securities Exchange South Africa, for completion. Responses were received from four of the five potential respondents, equating to an 80% response rate. The absence of a fifth response was compensated for by a review of the research findings by experienced auditors of Deloitte and the provision of their opinions thereon. These opinions were incorporated into the research results. This inclusion of Deloitte in the research resulted in views of experienced auditors of all of the co-called "Big Four" auditing firms being incorporated, enabling meaningful analysis and interpretation of the data.

Responses to the questionnaire were analysed, interpreted and documented in the form of a detailed best practice framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings in Chapter 5: *Analysis and interpretation of responses to questionnaire relating to overall audit strategies* and Chapter 6: *The incorporation of actuarial expertise into the overall audit strategy*.

As the combination of tests of controls and substantive tests differs among audits of different listed South African long-term insurers, no attempt to recommend an appropriate combination of tests of controls and substantive tests was made in the framework developed in this research. The framework provides a comprehensive discussion of all possible types of audit procedures that may be relevant to the audit of a particular area. In formulating the overall audit strategy for policy liabilities arising under insurance contracts and the related earnings of a particular long-term

insurance audit client, the auditor should select the combination appropriate to the particular audit from the comprehensive information provided in the framework.

Although, as was explained in Chapter 5, Section 1.2: *Relationship to the research objective*, it is not sensible to summarise the entire framework contained in Chapters 5 and 6 in this chapter, the principle areas covered by the framework are listed below:

- Gaining knowledge of the business of the client:
 - Product types.
 - Valuation bases and profit entitlement policies.
 - Actuarial and regulatory guidance.
 - Actuarial assumptions.
 - Non-accounting statistical data.
- Audit aspects of business and accounting processes:
 - The underwriting process.
 - Information technology processes.
 - Reinsurance processes.
 - Processes relating to the determination of actuarial assumptions.
 - Processes relating to source data used in the valuation.
- The application of the concept of materiality in the audit of listed South African long-term insurers.
- Nature of audit procedures performed on the following aspects:
 - Actuarial valuation methods.
 - Valuation assumptions.
 - Profit entitlements and earnings.
 - Source data.
 - Actuarial valuation calculations.
 - Validation and financial reporting of the valuation result.
 - Analytical procedures.
 - Management representations.
 - Deferred acquisition costs.
 - Non-profitable insurance contracts.

- Reinsurance.
- Investment return guarantees.
- Disclosure.
- Timing of audit procedures.
- Reliance on the work of internal audit.
- The incorporation of actuarial expertise into the audit process:
 - Alternative models for the incorporation of actuarial expertise into the audit process.
 - Competence and expertise of the actuarial expert.
 - Objectivity and independence of the actuarial expert.
 - Scope of the work of the actuarial expert.
 - Appropriateness of the work of the actuarial expert as audit evidence.
 - Aspects of review and conclusion of the audit relevant to reliance on an actuarial expert.

As no such framework existed prior to this research, the development thereof made a significant and useful contribution to existing knowledge. This contribution is the result of, *inter alia*, the method followed in designing the framework, resulting in it representing an extensive combination of, *inter alia*, the following:

- existing international and limited local guidance for auditors and, in particular, auditors of long-term insurers, customised for the South African environment;
- best practices currently in use on the audits of listed South African long-term insurers; and
- views of experienced practitioners on the abovementioned types of best practices that might not be employed at the moment, but that should, in their views, be employed in future.

As was described in Chapter 2, Section 2: *Research objective and value*, the research is of value to:

- Auditors of South African long-term insurers and those in some neighbouring countries. Although this research focused on listed long-term insurers, most elements thereof can also be applied on the audits of smaller, non-listed long-

term insurers (refer to Chapter 5, Section 9.3: *Audit of smaller, non-listed South African long-term insurers*).

- Certain investment analysts.
- Accountants and actuaries employed by long-term insurers.
- Local and international providers of auditing guidance.
- Academics conducting research on related topics.

The framework developed in this research can be used by standard setters to update and improve the existing guidance for auditors of South African long-term insurers. In support of this view, after having completed the questionnaire, three of the four respondents commented without solicitation that they had found the nature and scope of the questions contained therein very thought-provoking and that it had already prompted them to afford their overall audit strategies for insurance contracts and the related earnings renewed consideration in future. SAICA has also commissioned a project to revise the existing *Audit Guide on Long-Term Insurance* (SAICA, 1998a) and audit guide entitled *The Auditor's Relationship with the Statutory Actuary in the Long-Term Insurance Industry* (SAICA, 1998b), largely on the basis of the results of this research. It is recommended that the actuarial profession should play a significant role in the revision process by providing input into all actuarial aspects thereof.

Its value and the significance of its contribution to existing knowledge was also evident from an overall comment from Mr. M. Albert, financial services audit partner at Deloitte, who was one of the abovementioned reviewers of the framework, namely that the research was the most comprehensive exposition of issues relating to overall audit strategies for insurance contracts and the related earnings that he had ever encountered (Albert, 2005).

During the course of the research project, various areas were identified that may warrant further research in future. These areas are discussed in the next section.

2. AREAS IDENTIFIED FOR FUTURE RESEARCH

This section contains a discussion of key areas for future research identified during the course of this research.

As was mentioned in Chapter 2, Section 5.2: *Insurance contracts*, this research focused on overall audit strategies for policy liabilities arising under insurance contracts and the related earnings. Its scope excluded policy liabilities arising under insurance products that do not involve the transfer of significant insurance risk, for example pure investment-linked contracts. Although it is submitted that the audit of the policy liabilities arising under such contracts and the related earnings is less complex than that of insurance contracts, it may require the involvement of experts in areas such as financial instruments in the audit process. The audit of policy liabilities arising under these types of contracts and the related earnings can therefore be the topic of future research.

The focus of this research on insurance contracts as defined in IFRS 4 (AC 141): *Insurance contracts* (SAICA, 2004b) implicitly assumes that long-term insurers have already properly and appropriately categorised all in-force insurance contracts on the basis of the definitions contained in the abovementioned accounting standard as either insurance contracts or non-insurance contracts, and that their auditors are in agreement with these classifications. The application of these definitions to categorise insurance contracts is, however, currently problematic in practice. Further research in this regard could prove to be useful to accountants and auditors in the long-term insurance industry.

As was mentioned in point 5 in Chapter 2, Section 3: *Overall research design and method*, responses to a single question in the research questionnaire indicated unanimously that the overall audit strategy for a smaller, non-listed South African long-term insurer should not differ significantly from that for a listed long-term insurer. On the basis of this, no attempt was made in this research to customise the framework developed for such smaller long-term insurers. Further research on the potential for such customisation may nevertheless prove to be useful.

As was mentioned in Section 1: *Summary*, the concept of a Relative Inherent Risk Index was developed in this research. This concept can possibly be applied by auditors in all industries as a tool for the proper allocation of the audit budget and audit staff among the various elements of the audit. Further research of this nature may prove to be useful.

The research can also be expanded into the areas of audit opinions on regulatory returns and interim reports of South African long-term insurers. These areas have specifically been excluded from this research, as was discussed in Chapter 2, Section 5.6: *Other*.

Furthermore, as was mentioned in Chapter 6, Section 5.3.2.3: *Objectivity and independence of the actuarial expert*, an investigation of the potential for introducing requirements for the rotation of the actuarial expert, similar to those recently introduced for lead audit partners on the audits of listed clients, would be interesting to consider.

A recommendation in Chapter 6, Section 6.2.5: *Strained relationship between professions*, namely that the education and training of actuaries locally and internationally should include the necessary elements to facilitate an understanding of the objectives and work of the auditor to prevent any potential strain between the two professions during the audit process, can also be the object of useful future research.

As was mentioned in Section 1: *Summary*, SAICA has commissioned a project to revise the existing South African guidance for auditors largely on the basis of the results of this research. Once such guidance has been issued and implemented for a number of years to provide sufficient time for it to be embedded into overall audit strategies for South African long-term insurers, the extent of compliance by auditors of South African long-term insurers with the revised guidance and also the extent of revisions to overall audit strategies as a result of revisions to the guidance can be usefully investigated.

Although this research makes a significant contribution to the total research effort required to revise the abovementioned guidance, further research on a number of key areas in addition to those mentioned earlier in this section will be required as part of the revision process. These key areas include:

- The audit of Capital Adequacy Requirements and the related management actions as disclosed in the financial statements of long-term insurers.
- Providing assurance on embedded values where these are disclosed by long-term insurers.
- Audit of the taxation aspects of long-term insurers, which are significantly affected by actuarial issues such as those covered in this research.
- Audit of various aspects of reinsurance, particularly in smaller long-term insurers where this aspect may be significant.

The actuarial profession in South Africa provided input as part of the development of the existing South African guidance for auditors of long-term insurers. However, given the significance of the future revisions of the existing guidance on the basis of this research, particularly regarding the relationship between the auditor, the statutory actuary and the person(s) providing actuarial expertise in the audit process, useful research could be undertaken in respect of the development of joint guidance by the auditing and actuarial professions.

Lastly, the framework developed in this research can be further researched by obtaining the views of the management and internal auditors of listed South African long-term insurers on the appropriateness and usefulness of the framework.

3. CONCLUSION

This research provided further proof of the complex nature of and high risk involved in the audits of listed South African long-term insurers. The research also shows that the existing guidance for auditors of these insurers is in dire need of revision, particularly in the areas of policy liabilities arising under insurance contracts and the related earnings from long-term insurance activities.

The framework for the formulation of overall audit strategies for policy liabilities arising under insurance contracts and the related earnings developed in this research has significant practical value for experienced as well as inexperienced auditors of listed South African long-term insurers. For experienced auditors it provides an indication of best practices and an opportunity to reconsider current overall audit strategies for these areas. For inexperienced auditors it provides a very useful point of reference in respect of important considerations in making audit strategy decisions for these areas.

As such, the research makes a significant and valuable contribution to existing knowledge of overall audit strategies for insurance contracts and the related earnings. It also provides a strong basis for the revision of the existing guidance for auditors of long-term insurers.

The academic value of its contribution is clear from the fact that numerous publications in popular professional as well as accredited academic journals, plus a paper delivered at a conference have resulted from it. Its practical value is best demonstrated by the belief of Mr P.J. Strachan, Chairman of the Long-Term Insurance Interest Group of SAICA, namely that the research “will add enormous value to not only the auditing profession, but also the clients we serve” (Strachan, 2003).

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¹ With effect from 1 January 2005, all auditing pronouncements, including International Standards on Auditing issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants, have been adopted as the prevailing auditing pronouncements in South Africa. Circular B.1/2004 (PAAB, 2004) explains the adoption process. As a result of this adoption process, these standards do not have specific issue dates which complicated referencing in this dissertation. The effective date of adoption being 1 January 2005, it was decided to reference all these standards as “2005”, followed by a letter to distinguish them.

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APPENDIX A

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**HIGH INHERENT RISK ELEMENTS IN FINANCIAL
STATEMENTS OF LISTED SOUTH AFRICAN
LONG-TERM INSURERS**

Simon Petrus Johannes von Wielligh

Associate Professor: Auditing

University of Stellenbosch

HIGH INHERENT RISK ELEMENTS IN FINANCIAL STATEMENTS OF LISTED SOUTH AFRICAN LONG-TERM INSURERS

ABSTRACT

The objective of this research is to identify those industry-specific elements of the financial statements of listed South African long-term insurers that are potentially exposed to the highest level of inherent risk. Auditors of these companies should focus on these elements to ensure effective and efficient audits.

An exploratory literature study was conducted. A questionnaire was subsequently used to identify significant accounts potentially exposed to the highest level of inherent risk. Relative levels of inherent risk were measured using a “Relative Inherent Risk Index” that had been specifically developed as part of this research.

The research indicates that *policy liabilities* and *operating profit from long-term insurance activities* are potentially exposed to a significantly higher level of inherent risk than the other industry-specific elements of the financial statements of long-term insurers.

KEYWORDS

AC 121; Audit risk; Actuary; Inherent risk; Long-term insurance; Policy liabilities.

<p style="text-align: center;">HIGH INHERENT RISK ELEMENTS IN FINANCIAL STATEMENTS OF LISTED SOUTH AFRICAN LONG-TERM INSURERS</p>
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1. INTRODUCTION AND RESEARCH OBJECTIVE

In 2000 the Auditing Standards Board of the American Institute of Chartered Public Accountants conducted a survey entitled “Fraud-Related SEC Enforcement Actions Against Auditors: 1987 – 1997 (Beasley, Carcello & Hermanson 2001:63). It focused on instances where auditors failed to identify client fraud by means of the audit process and attempted to identify reasons for such failure. In 44% of the 45 cases surveyed, improper audit planning was identified as the reason for the failure. An element of audit planning that was specifically cited, was a failure to “properly assess inherent risk and adjust the audit program accordingly” (Beasley *et al* 2001:64).

Although the aforementioned survey focused specifically on the failure of the audit to detect fraud, the author is of the opinion that the results could well be applied to other deficiencies in the audit of financial statements.

Monroe and Juliana (2000:154) support the notion that the result of an under-estimation of inherent risk could be an ineffective audit, increasing the potential of legal liability for the auditor.

South African Auditing Standards require the auditor of an entity (“the auditee”) to assess audit risk and subsequently to design audit procedures to reduce this risk to an acceptable level (SAICA 1996). Audit risk should be assessed for each assertion related to each material account balance or class

of transactions contained in financial statements. The higher the audit risk related to the assertions in a particular account balance or class of transactions, the more extensive the audit procedures required to reduce audit risk for the particular account balance, or class of transactions, to an acceptable level.

Audit risk comprises three components, namely inherent risk, control risk and detection risk (SAICA 1996:para .03). Inherent risk describes the susceptibility of an account balance and the different assertions related thereto to material misstatement, assuming that no internal controls exist. Control risk refers to the risk that a material misstatement may not be prevented or detected and corrected by an auditee's internal controls, whereas detection risk is the risk that an auditor's audit procedures will not reveal a material misstatement (SAICA 1996).

Both inherent and control risk are the auditee's risks that exist independently of the audit, and are therefore not controllable by the auditor - they are exogenous to the audit (Bloomfield 1995:71; IFAC 2002b:para .20). The auditor can merely assess these pre-existing risks as input into the assessment of audit risk. Whereas the nature and quality of internal controls differ amongst entities, many factors affecting inherent risk are generic to all companies. Cash in almost any company is, by its nature of being highly desirable and movable, exposed to a high risk of theft, irrespective of the type of business of the company or the industry in which it operates (SAICA 1996:para .09). The focus of this research is on inherent risk.

Previous research on inherent risk as element of the audit risk model included the following aspects:

- Analytical properties of the audit risk model (Cushing & Loebbecke 1983).
- The process of assessing inherent risk (Bedard & Graham 2002; Bloomfield 1995; Daniel 1988; Kinney 1989; Monroe & Juliana 2000; Peters, Lewis & Dhar 1989).
- The assessment of inherent risk in archival studies (Houghton & Fogarty 1991; Waller 1993).
- The interdependencies between the elements of the model, including inherent risk and control risk (Dusenbury, Reimers & Wheeler 2000; Haskins & Dirsmith 1993; Hitzig 2001).

Standard setters and academics in the accounting profession have conducted extensive research on internal controls and control risk (Houghton & Fogarty 1991:1), as well as on the interdependencies between inherent and control risk. However, very little research has been done on the *identification* of inherent risk (Houghton & Fogarty 1991:2; Bedard & Graham 2002:40; Johnson 1987:124).

Haskins and Dirsmith (1993:79) believe that a more robust development and articulation of the concept of inherent risk through proper research may make it possible for auditors to rely thereon under favourable conditions. This, in turn, will facilitate audit efficiency without compromising audit quality. Monroe and Juliana (2000:154) and Peters *et al* (1989:360) infer that although the identification and assessment of audit risk is only one of several judgements the auditor makes during an audit, it is the first in the determination of audit

risk and, by implication, one of the most important. Furthermore, a study by Daniel (1988:180) concludes that more research on risk assessments by auditors is required to assist auditors in the practical application of the audit risk model and, by implication, the element of inherent risk.

The demutualisation and subsequent listing of two of the largest South African long-term insurers, Old Mutual Plc and Sanlam Ltd, in the late 1990s, sparked renewed interest in the financial statements of these groups. Whereas mainly policyholders previously used their annual reports, current and prospective shareholders now also rely on these reports to make investment decisions. As a result, auditors of South African long-term insurers face increased reliance on their audit opinions on these entities, and should consequently ensure, more so than ever before, that they perform efficient and effective audits on the financial statements of these companies. A crucial element is the proper assessment of the inherent risks related to these financial statements and the accounts and classes of transactions contained in them.

In 1998 the South African Institute of Chartered Accountants issued an Audit Guide on Long-Term Insurance (SAICA 1998b). This was, however, before the aforementioned demutualisations and listings, with the result that there is a potential requirement for substantial revision. The guide, for example, identifies a number of “higher risk areas” in the audit of long-term insurers, without properly associating all of these “areas” with significant accounts and assertions exposed to a high level of inherent risk (SAICA 1998b:19-22).

The objective of this research is therefore to identify those industry-specific elements of the financial statements of listed South African long-term insurance companies that are potentially exposed to the highest level of inherent risk. It was done by following the method described below.

2. RESEARCH METHOD

The following method was adopted in this research:

- (a) A literature review was conducted of previous local and international research on the topics of inherent risk, as well as of accounting and disclosure by and the audit of long-term insurers. The aim of the review was to provide a sound basis for the application of the concept of inherent risk in the further stages of the research. In particular, factors that might potentially impact on inherent risk at the account/assertion level (as opposed to the financial statement level) were identified from previous research.
- (b) Financial statements of listed South African long-term insurers were reviewed to identify the significant accounts that are specific to this industry (i.e. not pervasive to all industries) (“industry-specific”). Although one or more non-industry-specific elements of the financial statements of a particular South African long-term insurer may be exposed to a high level of inherent risk due to the specific circumstances of the particular insurer, these elements fall outside the scope of this research, as they
 - are not applicable to all South African long-term insurers, or
 - also apply to companies in other industries, whereas the focus of this research is solely on the long-term insurance industry.

(c) A questionnaire was sent to the audit executives responsible for the audits of the nine companies listed in the Life Insurance sector of the JSE Securities Exchange SA as at 29 October 2003. The questionnaire required respondents to assess inherent risk for each assertion related to each of the industry-specific account balances and classes of transactions identified in (b) above, based on each of the factors impacting on inherent risk, as identified in (a) above. Responses were used to identify the significant accounts and other elements that are potentially exposed to the highest level of inherent risk. This process is further explained in Section 6 of this article.

3. LITERATURE REVIEW

3.1 The concept of “Inherent Risk”

The introduction to this article mentions that failure to properly assess inherent risk is a major contributing factor to inefficient and ineffective audits, and, as such, has been a factor in previous audit failures. Johnson (1987:125) concludes that inherent risk evaluation is an important part of audit planning. He is supported by Houghton and Fogarty (1991:3) who indicate that the assessment of inherent risk is significantly more important in assessing the risk of material misstatement in financial statements than has been recognised previously. They base their conclusion on research conducted in the USA, UK and South Africa in 1991, which revealed audit partners' concern that areas of financial statements containing errors that required adjustments subsequent to the audit were not timeously and properly identified during audit planning.

Inherent risk is described in a number of different ways in auditing standards and literature (refer to *inter alia* Hitzig, 2001; Houghton & Fogarty 1991:1; Kinney 1989:69; SAICA 1996:para .03 and Whittington & Pany 2001:137). SAAS 400 (SAICA 1996:para .03) describes it as “the susceptibility of an account balance or class of transactions to misstatement that could be material ... assuming that there were no related internal controls.” This definition is expanded in the proposed Amendment to ISA 200 (IFAC 2002a:para .19) by relating the risk of misstatement to an assertion rather than merely an entire account balance or class of transactions. The inference from this is that inherent risk should be assessed (and could therefore differ) for each assertion related to each significant account balance or class of transactions. Hitzig (2001:54) interprets inherent risk as “an auditor’s impression of susceptibility to misstatement to form the basis for reasonable assurance, even though no audit procedures have been performed” .

There are a number of reasons why the auditor assesses inherent risk during the planning phase of the audit. They include the following:

- Identifying areas of the client’s business that are exposed to a high risk of material misstatement in the financial statements, in order to place **increased audit emphasis** on these and, in doing so, manage audit risk more effectively and efficiently. Dusenbury *et al* (2000:105) describe this as “balancing the trade-offs between efficiency and effectiveness in audits”.
- Determining the **scope of and approach to the audit** (Houghton & Fogarty 1991:1). According to Shaun F. O’Malley, former head of

PricewaterhouseCoopers, you first “evaluate risk; then you develop an audit program to focus on high-risk areas” (Tie 2000:20).

- **Managing the risk of loss** from engagements by pricing the audit in such a way that audit fees reflect the risk of material misstatements in a client’s financial statements (Bedard & Graham 2002:39).
- Providing a **means of communication** among audit team members by focusing them on the key issues within a client’s business and financial statements (Bedard & Graham 2002:40).
- Providing a **context** within which audit evidence gathered during the execution phase of the audit may be understood and evaluated in terms of sufficiency and appropriateness (Bedard & Graham 2002:40).

The Proposed International Standard on Auditing entitled “Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement” discusses the important relationship between inherent risk and business risk (IFAC 2002b:para .36 -.39). Business risk is described as resulting “from significant conditions, events, circumstances or actions that could adversely affect the entity’s ability to achieve its objectives and execute its strategies”. Business risk provides a useful platform for the identification of inherent risk. The ambit of business risk is, however, much wider than that of inherent risk, as the latter focuses only on the risk of material misstatement of the financial statements. It follows logically that:

- all inherent risks are also business risks, but

- all business risks are not also inherent risks – only those business risks that may potentially result in material misstatement of the financial statements, are also inherent risks.

It is stated in the introduction to this article that inherent risk is exogenous to the audit. All financial statements contain a higher or lower degree of risk of material misstatement. These misstatements may be unintentional (errors) or intentional (fraud), and may affect either the Rand value of the account (quantitative), or its disclosure (qualitative) (Arens & Loebbecke 1997:262).

The exogenous nature of inherent risk implies that the auditor cannot *change* inherent risk. During the planning stage of the audit, he/she can do no more than to assess the factors that affect inherent risk for the financial statements as a whole, as well as for each assertion related to each material account balance and class of transactions, using quantitative and/or qualitative measures. Houghton and Fogarty (1991:2) indicate that the assessment of inherent risk is an effective step in the audit planning process, and that an auditor with a sound understanding of the client's business is able to perform this step with relative ease. Peters *et al* (1989:363), however, conducted interviews with auditors and discovered that identifying specific characteristics of accounts that might increase the risk associated with the account is one of the tasks that auditors found to be difficult.

It is important to be mindful of the fact that the mere presence of an inherent risk factor does not imply that the related account balances and assertions are materially misstated. It simply indicates that the risk of misstatement in the

particular account balance and assertion is higher than it would have been if the inherent risk factor were not present (Knechel 2001:333).

In this research that focuses on inherent risk, it is assumed that inherent risk is assessed separately from control risk. Some auditors choose to conservatively assume that inherent risk is always at a maximum (or 100%) (Daniel 1988:175 and Hitzig 2001:54). This method is currently allowed by SAAS 400 (SAICA 1996:para .08). It takes into account the fact that an interdependency exists between inherent risk and control risk. Proponents of this approach suggest that it ensures that the combined assessment of inherent and control risk is not underestimated, which could result in an ineffective audit.

Haskins and Dirsmith (1993:79), in contrast, conclude that this approach could result in an over-estimation of the aforementioned combined risk, thus resulting in an inefficient audit. This conclusion is supported by the proposed International Standard on Auditing entitled “Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement” (IFAC 2002b:para .95), which requires auditors of **all** entities to assess the risk of material misstatement, both at financial statement and account balance and assertion level, effectively disallowing the conservative approach described in the previous paragraph.

Inherent risk exists and should be assessed as follows:

- At the level of the financial statements as a whole (“financial statement level”); and

- at the level of individual assertions related to each material account balance or class of transactions (“account/assertion level”) (SAICA 1996:para .08).

Inherent risk at the financial statement level comprises risks that are pervasive to all account balances and classes of transactions, and often relates to the inherent nature of the client and its business, as well as the industry, markets and environments in which it operates (Whittington & Pany 2001:137). Examples of inherent risks at this level are risks relating to the continued existence (going concern) of an entity. Inherent risk assessments at this level are used to decide whether the auditor should retain a client based on its risk profile, and also to provide an overall perspective on inherent risks at account balance level (Peters *et al* 1989:361).

Inherent risk at financial statement level is excluded from the scope of this research.

Peters *et al* (1989:367) found strong evidence that auditors ultimately perform assessments of inherent risk at account level. The focus of this research is on inherent risks at the account/assertion level within listed South African long-term insurers.

SAAS 400 (SAICA 1996:para .09) states that inherent risk at the account/assertion level is potentially affected by a number of factors which include the following:

- The nature of the asset, liability or transaction reflected in the account (cash, for example, is exposed to a higher risk of theft (the existence assertion) than is property).
- History of errors in the account.
- The complexity of transactions reflected in the account.
- The degree of judgement involved in determining the account balance.
- The inclusion of unusual transactions, not subject to routine processing, in the account, particularly near period end (the frequency of transactions). This factor encompasses the experience level of client staff who are involved in processing entries to the account (Houghton & Fogarty 1991:2).

The proposed International Standard on Auditing entitled “Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement” (IFAC 2002b:para .105) adds the following factors to the above list:

- The risk of fraud contained in the account balance or class of transactions.
- The materiality of the account balance and potential misstatement contained in it (confirmed by Puttick & Van Esch 2003:141), including the number of transactions (Knechel 2001:334).

Whittington and Pany (2001:137) introduce the following factors in addition to those above:

- Account balances or transactions that are difficult to audit. (In the author’s opinion this factor is related to detection risk rather than to inherent risk and is therefore not used as an indicator of inherent risk in this research).

- Valuations that vary significantly in accordance with variances in economic factors.

Research by Johnson (1987) and Messier and Austen (2000:124) supports the factors mentioned above.

In summary, the following important characteristics of inherent risk have been identified:

- It is assessed during the planning phase of the audit.
- It is exogenous to the audit.
- It exists at both financial statement and account/assertion levels.
- Elements of financial statements possess inherent characteristics (“indicators of inherent risk”) that should be considered by the auditor in assessing inherent risk.

3.2 Aspects relevant to accounting and disclosure by listed South African long-term insurers

The demutualisation and listing of Sanlam Ltd and Old Mutual Plc in the late 1990s turned the spotlight onto financial reporting by listed South-African long-term insurers. A similar situation occurred in New Zealand during the early 1990s (Adams 1996:719).

Two major categories of users of financial statements of listed South African long-term insurers are policyholders and shareholders. **Policyholders** are generally interested in certainty about the security of their policy benefits

(future claims), which are reflected in the policy liabilities account balance and related disclosures. **Shareholders**, on the other hand, are interested in a sound return on their investment (dividends and capital growth), as reflected in the earnings of the insurer. These stakeholder influences on the business underline the importance to users of fair presentation of the aforementioned elements of the financial statements.

Even a cursory glance at the financial statements of a long-term insurer highlights the fact that presentation and disclosure in these are fundamentally different from any other type of business. One of the major reasons for the differences is the fact that the financial statements combine the activities of shareholders with those of policyholders in one set of financial statements (Von Wielligh 2001b). The shareholders earn their profits from the carrying on of different types of long-term insurance business (depending on the nature of the different insurance products (policy types) sold by the insurer) between the insurer and the policyholder.

Accounting for and presentation of long-term insurance activities in the financial statements of long-term insurers are very complex issues. In order to be in a position to properly assess the inherent risks related to the financial statements of a long-term insurer, the auditor of a long-term insurer requires sound knowledge of the economy and industry, as well as of the specific business of the insurer (including product types and characteristics) and actuarial issues. This conclusion is supported by the Audit Guide on Long-Term Insurance (SAICA 1998b:1), which states that auditors should undertake audits of long-term insurers only after careful consideration of their

own competence. Auditors of long-term insurers should have a proper understanding of, *inter alia*, the accounting methods peculiar to the long-term insurance business.

A review of the accounting guidance on long-term insurance business in South Africa (SAICA 1994), the United Kingdom (ABI 1998), Australia (AASB 1998), New Zealand (ICANZ 1998 and 1999) and the United States of America (FASB 1982, 1987 and 1995) indicated that specific guidance exists on accounting and disclosure of certain account balances, classes of transactions and other elements of the financial statements of long-term insurers. Canadian guidance was excluded from this review, as standard setters are currently revising local guidance to bring it in line with international guidance (Canadian Institute of Chartered Accountants 2003). It follows logically that these areas are internationally considered to be “industry-specific” to the long-term insurance industry. They include the following main items: premiums and claims (policy benefits), reinsurance, investment revenues (income and realised and unrealised gains and losses), policy liabilities (including participating benefits), assets (investments), income tax, and commission and other new business costs or acquisition costs, and the deferral thereof.

3.3 Aspects relevant to the audit of listed South African long-term insurers

The stronger focus of users on the financial statements of listed South African long-term insurers increases the importance of an appropriate audit opinion on these statements. In order to express an appropriate audit opinion, the

auditor needs to focus audit procedures on elements of the financial statements that are exposed to a high level of audit risk. As mentioned earlier in this article, the identification of these elements commences with an assessment of the inherent risk of the various elements of the financial statements.

The Audit Guide on Long-Term Insurance (SAICA 1998b:para .50) lists areas of concern relating to inherent risk at both financial statement and account/assertion level that the auditor should consider. Those related to the account/assertion level, which is the focus of this research, include the following:

- Details of classes of business (policy types) written (relate to the nature of the liability reflected in the account).
- Details of assets (investments) that back liabilities to policyholders.
- Characteristics of policyholders.
- Premium and decrement (policy movement) experience.
- Commission and administrative expenses structure.
- Actuarial valuation basis and related assumptions (no reasons for this statement are provided in the Guide – it is explored in section 5 of this article).

The Audit Guide also identifies the following as potential “higher risk areas” in the audit process. Only inherent risk exposures at the account/assertion level are listed below, since inherent risks at the financial statement level, as well as control risk and detection risk, fall outside the scope of this research:

- Actuarial valuation.
- Commission account debit and premium debit and credit balances.
- Control accounts.
- Completeness of reinsurance.

The aforementioned areas are supported by the indicators of inherent risk identified in Section 3.1 of this article.

Although the author does not disagree with the list of higher risk areas mentioned in the aforementioned Guide, he believes that they require reconsideration as the guide was drafted in the period prior to the demutualisation and listing of Sanlam Ltd and Old Mutual Plc. Two of the largest South African life insurers, they collectively comprised 74% of the market capitalisation of the Life Insurance sector of the JSE Securities Exchange SA as at 29 October 2003, resulting in an increased interest of shareholders in the earnings from long-term insurance activities as described above. The demutualisations and listings may have altered the inherent risk indicators relevant to these companies significantly, as will be explored in the remainder of this research.

4. INDUSTRY-SPECIFIC SIGNIFICANT ACCOUNT BALANCES AND OTHER ELEMENTS

It should be noted that it is not possible to make a direct comparison between the disclosure requirements in AC101 – Presentation of Financial Statements (SAICA 1998a) and AC121 – Disclosure in the Financial Statements of Long Term Insurers (SAICA 1994). This is because the latter deals only with a

number of particular aspects of the financial statements of South African long-term insurers, and it does not provide a comprehensive example of financial statements comparable to that in AC101.

As a result, the latest available financial statements of the listed South African long-term insurance companies in Appendix A were reviewed to identify those significant accounts and classes of transactions contained therein that are specific to listed South African long-term insurers (i.e. accounts that do not appear in the general purpose financial statements of companies in other industries). Significant accounts and classes of transactions are those that contain a high risk of material misstatement.

The following were the accounts identified to be considered in the remainder of this research:

- Premiums from long-term insurance policies.
- Commission paid to long-term insurance intermediaries.
- Policy benefits (claims) paid to long-term insurance policyholders.
- Liabilities to policyholders under unmatured policies (“policy liabilities”).
- Operating profit from long-term insurance activities.

The areas identified above are largely similar to those identified in the literature study in Section 3.2 above, except for the following items (reasons for exclusion for the purpose of this research are provided in brackets):

- Reinsurance (the amounts of reinsurance premiums and claims included in the reviewed South African financial statements were generally not

considered to be material in relation to total premiums and claims respectively).

- Investments and related revenues, as well as income tax. (These items are pervasive to many industries. They were considered in the research, however, to the extent that these items impact on the inherent risk of policy liabilities.)

5. HYPOTHESES

The following hypotheses were adopted in this research:

- (a) Liabilities to policyholders under unmatured policies is an industry-specific account balance that possesses inherent characteristics that should result in the assessment of inherent risk for most relevant assertions at a high level, relative to other industry-specific account balances.
- (b) Operating profits from long-term insurance activities is an industry-specific account balance that possesses inherent characteristics that should result in the assessment of inherent risk for most relevant assertions at a high level, relative to other industry-specific account balances.

The following section of the article briefly explains the rationale for the hypotheses by focusing on each of the relevant indicators of inherent risk as identified in Section 3.1 and taking into account the nature of the long-term insurance industry and related accounting and disclosure. Throughout, it is important to be mindful of the interrelationship between the aforementioned elements of the financial statements (Peters *et al* 1989:367).

5.1 Nature of the asset, liability or transaction

Policy liabilities are by nature among the largest, if not the largest, line items in the financial statements of a long-term insurer. Consequently, even an insignificant misstatement of policy liabilities measured as a percentage of total policy liabilities, whether intentional or not, has a potentially material impact on fair presentation in the financial statements. Such misstatement often has a very material impact on operating profit, due to the inter-relationship between these items, as described in Section 5.3 below. This risk is exacerbated by the subjective nature of these items as discussed in Section 5.4.

5.2 History of errors

This indicator is not generic to all long-term insurers, but dependent on the auditor's past experience with the client. In the current research all assertions relating to all industry-specific accounts will therefore be assumed to have a high exposure to inherent risk. As a result, history of errors will not have a direct impact on the Relative Inherent Risk Index (refer to Section 6).

5.3 Complexity of transactions

Policy liabilities are calculated by discounting expected future cash flows resulting from policy contracts at a particular discount rate. The expected future cash flows and discount rate are based on the insurer's assumptions about, for example, future mortality (death) rates, interest rates and inflation rates. When the insurer's assumptions change, policy liabilities change concomitantly. The fair values of the investment assets backing the policy

liabilities do not, however, necessarily change to the same extent, as these are determined by the investment markets. The movement in the net assets (assets less liabilities) of the insurer from one financial year to the next as a result of a change in assumptions therefore results in profits or losses for shareholders.

The actuarial valuation process is inherently a complex mathematical and statistical process that relies heavily on existing source data, complex formulae and actuarial assumptions in respect of future trends in elements such as those mentioned above (Von Wielligh 2001a:9). The complexity of the actuarial valuation process therefore increases the inherent risk of a material error being contained in policy liabilities and the resulting operating profit.

5.4 Degree of judgement involved

As was alluded to in the previous section, the actuarial valuation process to calculate policy liabilities, with its concomitant effect on operating profit, is heavily reliant on the actuary's assumptions about various factors, including expected future mortality (death), morbidity (disability), inflation rates and investment returns. In respect of items such as with-profit policies, the actuary needs to assume what policyholders' reasonable expectations of bonuses would be, as this has a direct impact on operating profit.

Operating profit is governed by the insurer's profit entitlement policies. These policies describe the manner in which shareholders earn their profits from the various long-term insurance activities performed by the insurer, and can be

linked to specific product lines. The appropriateness and consistent application of these policies are also a matter of judgement, which further increases the inherent risk of, in particular, the accurate measurement of operating profit.

5.5 Unusual (non-routine) transactions

The South African Concise Oxford Dictionary (2002) defines the term “unusual” as “not habitually or commonly done or occurring”. The present research assumes this definition as applied from the point of view of a qualified Chartered Accountant (SA) and Registered Accountant and Auditor with no specialised training relating to the long-term insurance industry.

Johnson (1987:124) states that risk factors that influence the processing of routine transactions often differ from those affecting the processing of non-routine transactions and accounting estimates.

The unusual nature of many transactions related to accounting for policy liabilities and operating profit is best demonstrated by a largely simplified example. For many simple typical risk products (as opposed to investment products) profits are earned by shareholders as a result of the actual experience of the insurer differing from the previously assumed experience. Assume that a policyholder holds a life insurance policy that will pay out a fixed amount upon death, and pays monthly premiums on the policy. The insurer will make an assumption based on age and other factors as to the policyholder's life expectancy, and, by inference, his/her expected date of death. Risk premium rates will be set at a level that will ensure that the funds

required to provide the policy benefit at the **assumed** date of death of the policyholder, are available at that date. This element of each premium received then has to be accounted for as such.

The policyholder eventually dies later than was assumed, resulting in the receipt of risk premiums from the policyholder for a longer period than was assumed. The insurer does not require these premiums for the period after the originally assumed date of death, to pay the contracted policy benefits to the policyholder when they eventually become due. Premiums up to the assumed date of death have been set aside for this purpose and accounted for as such. The “unnecessary” premiums can therefore be released to shareholders as profit, and have to be accounted for as such.

In this example, the assets that back the policy liability (representing premiums received by the insurer up to the originally assumed date of death) are essentially those of the policyholder, and should therefore appear on his/her “balance sheet”. The shareholders earn no profit from these premiums. The premiums received afterwards, however, do not belong to the policyholder, and should be recognised as profit in the “income statement” of the shareholders.

These transactions are not recorded in the financial accounting records of the long-term insurer in the way described above. Instead, a separate actuarial accounting system is required to accurately record these transactions, which is not a common occurrence in other types of business. This example

demonstrates the unusual nature of many transactions that affect policy liabilities and operating profit.

Furthermore, operating profits from long-term insurance activities arise only in part as the difference between income and expenses as recorded in the financial accounting system of the insurer. A potentially significant element thereof, namely the release or strengthening (increase) by the actuary of reserves previously held, is recorded in the income statement by means of non-routine year-end journal entries originated by the actuary. To obtain an understanding of the actual sources of the total operating profit from long-term insurance activities, the actuary performs a complex analysis of earnings using information not directly available from the financial accounting systems. Compared to most other types of business, this method is highly unusual.

Although AC121 (SAICA 1994) provides guidance on presentation and disclosure in the financial statements of long-term insurers, it provides no guidance as to measurement and recognition of transactions and balances. Various Professional Guidance Notes issued by the Actuarial Society of South Africa provide guidance to the **actuary** on, *inter alia*, measurement of policy liabilities, but no **accounting** guidance relating to the transactions involved. A lack of recent authoritative accounting guidance on these transactions therefore exists in South Africa.

This situation is by no means different from that in many other parts of the world. Although the International Accounting Standards Board has recognised that there is a dire need in this area, and has issued a Draft

Statement of Principles (IASB 2001), no formally approved guidance currently exists internationally.

This situation clearly demonstrates the exposure of transactions relating to policy liabilities and operating profit to significant disparity in accounting practices – in turn potentially exposing these items to a high level of inherent risk.

5.6 Risk of fraud

Due to the subjective nature of policy liabilities, and their concomitant effect on operating profit, these items are very susceptible to fraudulent financial reporting with a view to intentionally misleading users of financial statements.

5.7 Materiality

The process of identifying industry-specific account balances or classes of transactions described in Section 4 of this article focused solely on *material* line items. By definition, therefore, all assertions related to each of the identified accounts are exposed to a high level of inherent risk, if assessed solely according to the indicator of materiality of the account balance or potential misstatement thereof. As a result, materiality will not have a direct impact on the Relative Inherent Risk Index (refer to Section 6).

5.8 Exposure to volatility in economic factors

Various products sold by long-term insurers are affected by volatility in the investment markets. The policy liability for pure market-linked products, for

example, is derived directly from the market value of the underlying investments, which, by its nature, is exposed to any volatility in the market.

Investment market volatility can also have a direct impact on operating profit. Products that provide a guaranteed return on investment to the policyholder expose the shareholder to volatility in the investment markets, as any shortfall in assets backing the guaranteed policy liability has to be recovered from shareholder funds, impacting directly on operating profit.

The above examples clearly demonstrate why the valuation and presentation and disclosure assertions – as they relate to both policy liabilities and operating profit – are potentially exposed to a high level of inherent risk when assessed from the point of view of exposure to variations in economic factors.

6. EMPIRICAL STUDY

The questionnaire (refer to Section 2) required each respondent to assess, in matrix format, as either “high” or “low”, the inherent risk for each assertion as it applies to each of the industry-specific account balances or classes of transactions identified in Section 4 of this article. The assessment is based solely on each of the eight indicators of inherent risk as identified in Section 3.1 of this article (also refer to sections 5.1 – 5.8) for a relatively “normal” financial year in the business of his/her long-term insurance client. This process was followed to identify those industry-specific account balances and classes of transactions of listed South African long-term insurance companies that possess inherent characteristics that should lead to the assessment of inherent risk at a high level by their auditors. The rationale was that the

account balances and classes of transactions and related assertions that possess most of the inherent risk characteristics represented by the eight indicators of inherent risk, are those that would be assessed as having the highest levels of inherent risk.

Responses were received from eight of the nine potential respondents. Where considered necessary, telephonic follow-up interviews were conducted with respondents to clarify elements of responses.

For each response in isolation, the relative exposure level (EL) was calculated for each assertion related to each account balance or class of transactions. The number of indicators of inherent risk to which a particular account is potentially exposed, was expressed as a percentage of the total of eight indicators, providing an indication, per account and assertion, of the relative potential exposure to numerous risk factors (indicators). Finally, a Relative Inherent Risk Index (RIRI) was determined for each account balance or class of transactions by calculating the mathematical average of the ELs across all relevant assertions.

The mathematical average of the RIRIs per account balance or class of transactions was then calculated across all responses.

Table 1 below contains a summary of the results of this process.

TABLE 1: RELATIVE INHERENT RISK INDEX PER ACCOUNT						
ACCOUNT	LEVEL OF EXPOSURE TO INHERENT RISK INDICATORS					RIRI
	C	E/O	V/M	R&O	P&D	
Premiums	28%	38%	39%	N/A	36%	35%
Commission	42%	33%	41%	N/A	36%	38%
Policy benefits	33%	52%	58%	N/A	36%	45%
Policy liabilities	77%	52%	80%	67%	59%	67%
Operating profit	53%	48%	58%	N/A	45%	51%

Key:

C = Completeness assertion

E/O = Existence / Occurrence assertion

V/M = Valuation / Measurement assertion

R&O = Rights and Obligations assertion

P&D = Presentation and Disclosure assertion

It is clear from Table 1 that the RIRIs for *policy liabilities* and *operating profit from long-term insurance activities* are higher than those for any of the other accounts, across all assertions. These are also the only accounts for which the RIRIs exceed 50%. All other accounts have RIRIs of 45% and lower, indicating a relatively low exposure to inherent risk on average across all assertions. As the business model and types of business sold by each of the insurers included in the survey were different, the exposure levels of each account or class of transactions to individual assertions varied from one response to the next. However, responses yielded largely similar overall results, except in the areas specifically mentioned in the following paragraphs.

The RIRIs for policy liabilities were significantly higher than those for premiums, commission and policy benefits for all responses. This indicates that the relative inherent risk relating to policy liabilities is significantly higher than that of the latter three accounts, and therefore proves the hypothesis formulated in Section 5 (a).

In 50% of the responses, the RIRI for operating profit from long-term insurance activities was lower than one or more of those for premiums, commission and policy benefits. Although in the overall result the RIRI for this item is higher than those of the aforementioned items, the difference is not as significant as was expected. This result was subsequently discussed with respondents in follow-up interviews.

Operating profit earned from the sale and administration of market-related business by long-term insurers (as opposed to conventional risk business) is significantly less exposed to subjective judgements by the actuary in the calculation of the related policy liabilities, which results in lower inherent risk exposures. As a number of insurers included in the survey sell a significant proportion of this type of business, the responses reflect this lower assessment of inherent risk related to operating profit from long-term insurance activities. In follow-up interviews, all these respondents indicated that, had the product mix of the insurer been different (i.e. a greater proportion of conventional risk business), their assessment of inherent risk related to operating profit from long-term insurance activities would have been significantly higher (i.e. the RIRI for operating profit would have been significantly higher). This proves the hypothesis formulated in Section 5 (b).

It is noteworthy that the overall RIRI for policy benefits is high compared to the indices of premiums and commission. This difference results from three of the eight respondents assessing specifically the valuation assertion as being exposed to a high level of inherent risk based on a number of indicators.

Their assessment resulted in a higher average RIRI for this item in the overall result.

Follow-up interviews indicated that these responses could again be attributed to insurers who sell a large proportion of market-related products. The value of the policy benefit in these products is not fixed in the policy contract, but related (and therefore exposed) to the volatility of the market value of an underlying portfolio of investments on the effective date of the claim. The author believes that the high inherent risk assessment in these cases could possibly be related to the valuation of investments (a non-industry-specific item that falls outside of the scope of this research), rather than to the valuation of policy benefits.

It should be borne in mind that the RIRI ranks exposure to inherent risk in the industry-specific accounts included in this research relative to each other only. It provides no indication of their inherent risk levels relative to other non-industry-specific accounts also included in the financial statements of a long-term insurer.

7. CONCLUSION

In this research the author set out to identify those industry-specific elements in the financial statements of listed South-African long-term insurers that are potentially exposed to the highest levels of inherent risk.

A literature study was conducted to provide a sound basis for the application of the concept of inherent risk in the remainder of the research, particularly

with a view to establishing factors that might have an impact on inherent risk at the account/assertion level. Eight factors were identified as indicators of inherent risk, namely

- nature of the asset, liability or transaction;
- history of errors;
- complexity of transactions;
- degree of judgement involved;
- unusual (non-routine) transactions;
- risk of fraud;
- materiality; and
- exposure to volatility in economic factors.

Financial statements of four listed South African long-term insurers and related accounting and financial reporting guidance were reviewed to identify significant account balances specific to the long-term insurance industry to be used in the remainder of the research. These accounts are premiums, commission, policy benefits (claims), policy liabilities and operating profit from long-term insurance activities.

An empirical study was subsequently conducted by

- developing the new concept of a Relative Inherent Risk Index, used to rank accounts in order of their level of potential exposure to inherent risk;
- obtaining input from the auditors of eight of the nine listed South African long-term insurance companies as to their assessment of the relative degree of exposure to inherent risk of industry-specific account balances

and classes of transactions by means of questionnaires and follow-up interviews; and

- calculating and interpreting the Relative Inherent Risk Index.

The research confirmed the hypothesis that *policy liabilities* and *operating profit from long-term insurance activities* are potentially exposed to a significantly higher level of inherent risk than any of the other industry-specific elements in the financial statements of listed South-African long-term insurers, particularly in the case of an insurer who sells conventional risk products. The conclusion applies to all assertions relevant to the two items mentioned. Although the relative inherent risk pertaining to *operating profit from long-term insurance activities* is lower in insurers who sell a greater proportion of market-related products, this item is still considered to be exposed to a higher level of inherent risk than other industry-specific items.

As the existing South African guidance for auditors of long-term insurers contains very limited guidance on the audit of *policy liabilities* and *operating profit from long-term insurance activities*, there is in the author's view a dire need for guidance to be expanded in these areas.

The author is of the opinion that the concept of a Relative Inherent Risk Index as developed in this research can be usefully applied by auditors in all industries. The index may be used as a helpful tool in the proper allocation of the audit budget and audit staff among the various elements of the audit.

The author believes that the current research should be of value to the following stakeholders:

- Auditors of South African long-term insurers – by giving them an indication of the high risk areas in these clients and focusing their audit efforts, thus resulting in a more efficient and effective audit and limiting potential legal liability.
- Auditing and accounting standard setters, notably the South African Institute of Chartered Accountants and the Public Accountants and Auditors Board – regarding future revisions of the existing guidance on the audit of long-term insurers.
- Investment analysts who conduct research on South African long-term insurers – assisting them to ask probing questions in the high risk areas identified.
- Accountants and actuaries employed by long-term insurers – enabling better communication between these two professions in the organisation.
- Academics who conduct research on the audit process, audit risk, long-term insurance and related fields.

APPENDIX A

LISTED LONG-TERM INSURERS WHOSE FINANCIAL STATEMENTS WERE REVIEWED

Company	Year End
Liberty Group Limited	31 December 2002
New Africa Capital Limited	31 December 2002
Old Mutual Life Assurance Company (South Africa) Limited	31 December 2002
Sanlam Limited	31 December 2002

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APPENDIX B

**E-mail by P.J. Strachan of SAICA to introduce and secure
support for the research**

From: Gillian.Botha@za.ey.com on behalf of Philip.Strachan@za.ey.com
Sent: 07 October 2004 04:34 PM
To: [E-mail addresses deleted to protect confidentiality of respondents]
Cc: Von Wielligh Spj, Prof <pvw@sun.ac.za>; cynthiam@saica.co.za
Subject: PhD Research Project - Professor Pieter von Wielligh

Importance: High

The SAICA Long Term Insurance Interest Group has supported a proposal that the audit guide on long term insurance issued in March 1995 be revisited and it is a project which will require substantial input.

Professor Pieter von Wielligh of the University of Stellenbosch has indicated his willingness to be an integral part of this research process which he intends to use for his PhD which research needs to be completed by the end of the 2005 academic year. This provides us with an opportunity to update the audit guide and to take into account the enhancements which will need to be considered because of new accounting standards, new auditing standards, enhanced corporate governance and other changes to statute regulations etc.

The purpose of this letter is to encourage you to participate in the research project with Prof. von Wielligh which I believe will add enormous value to not only the auditing profession but also the clients we serve. Prof. von Wielligh will be contacting each one of you in due course and will be discussing his proposed methodology and also the questionnaire he intends to use for the first phase of the project which will focus on the audit of policy liabilities under insurance contracts and the related earnings: two high risk areas where I believe that guidance for auditors could be most useful.

As I understand the position the following partners are involved in the undermentioned insurance companies:

Insurer	Firm	Partner*	Contact Details*
Old Mutual	KPMG		
Sanlam	Ernst & Young		
Liberty	PWC		
Momentum	PWC		
Metlife	PWC		
Other	PWC		

* - Details in these columns have been deleted to protect confidentiality of respondents

Should you require any further information please feel free to contact me and I look forward to your support of this very important project. I will also be including this item on the agenda of the next SAICA Long Term Insurance Interest Group and will be asking Prof. von Wielligh to attend that meeting.

With kind regards and thanks

Philip Strachan
 Chairman: SAICA Long Term Insurance Interest Group

Ernst & Young South Africa - <http://www.ey.com/za>

IMPORTANT NOTICE: This e-mail is subject to the Ernst & Young disclaimer which can be viewed at http://www.ey.com/GLOBAL/content.nsf/South_Africa/Disclaimer/

APPENDIX C

**Introductory covering e-mail from S.P.J. von Wielligh to
respondents**

From: Von Wielligh Spj, Prof <pvw@sun.ac.za>
Sent: 14 October 2004 04:38 PM
To: [E-mail addresses deleted to protect confidentiality of respondents]
Cc: [E-mail addresses deleted to protect confidentiality of respondents]
Subject: Further contact: PhD Research Project - Pieter von
Wielligh

REPLY REQUESTED BY FRIDAY 22 OCTOBER 2004

PLEASE NOTE: This e-mail is addressed to the key contact identified for each insurance client. Other contacts identified have been copied for information purposes. Only key contacts are required to reply, after consultation with the relevant other contacts involved in the audit of the respective clients.

+++++

Dear Audit Partner/Director

Philip Strachan's e-mail to you entitled "PhD Research Project - Professor Pieter von Wielligh" dated 7 October 2004, refers.

Attached please find self explanatory information introducing my research to you and requesting your invaluable participation.

Included in the attachment is a form requesting information regarding your availability to meet with me during November 2004. I would appreciate your response to this by the end of FRIDAY 22 OCTOBER 2004.

Please do not hesitate to contact me should you require any further information or should you want to discuss any details.

Thank you for your support of this project. I look forward to meeting with you in due course.

PLEASE CONFIRM RECEIPT OF THIS E-MAIL BY RETURN E-MAIL FOR FOLLOW-UP PURPOSES.

Yours sincerely

Prof SPJ von Wielligh CA(SA)
Afdelingshoof: Ouditkunde / Divisional Head: Auditing
Dept Rekeningkunde/Dept of Accountancy
Universiteit van Stellenbosch/University of Stellenbosch
Privaat Sak X1 / Private Bag X1
Matieland, 7602
Tel: +27(0)21 808 3846
Fax: +27(0)21 886 4176
Email: pvw@sun.ac.za
Website: www.sun.ac.za/accounting

APPENDIX D

Introductory letter

14 October 2004

Dear Audit Partner/Director

REQUEST FOR STRUCTURED INTERVIEW FOR RESEARCH PURPOSES: AUDIT OF [CLIENT NAME]

You would recently have received an e-mail dated 7 October 2004 from Mr Philip Strachan in his capacity as chairman of the Long-Term Insurance Interest Group of SAICA, explaining my involvement in the process of ultimately updating the existing audit guides on long-term insurance, and requesting your support for this process. The purpose of this letter is to:

- Provide information regarding my research project;
- Provide more detailed information regarding the structured interview which forms an integral part of the research;
- Request your participation in and commitment to the research project; and
- Arrange a suitable date, time and location for the structured interview.

Information regarding my research project

I am a qualified CA(SA) employed by the University of Stellenbosch as a full-time academic. I am currently registered as a PhD candidate and intend to complete the research in time to be awarded the degree at the end of the 2005 academic year. I enclose a summarised Curriculum Vitae for your perusal.

The title of my dissertation is “The development of a best practice audit approach to insurance contracts and the related earnings of listed South African long-term insurers”. My interest in this topic stems from having been involved for several years in the audits and various other aspects of long-term insurers, including a demutualisation. My audit experience includes the first time application of SAAS 620 – Using the work of an expert, in the audit of a South African long-term insurer.

The research focuses on the audit of *policy liabilities* under “insurance contracts” (as currently defined in IFRS 4 – Insurance Contracts) and the *related earnings* from long-term insurance activities. By definition, the focus is on products that contain a significant element of insurance risk and not on pure investment linked products.

The research is expected to be of value to, *inter alia*, auditors of all South African long-term insurers and standard setters.

The “Big Four” auditing firms in South Africa all make use of “risk based” audit approaches (or overall audit strategies as they are nowadays referred to): they focus their audit efforts on high risk elements of the financial statements on which they express an audit opinion.

An important element of the research was therefore to prove the hypothesis that policy liabilities and the related earnings from long-term insurance activities are the elements of the financial statements of listed South African long-term insurers that are potentially exposed to the highest level of inherent risk. This element of the research has been completed and the aforementioned hypothesis was proven. The research was also published in Volume 1 of the 2004 edition of the accredited accountancy research journal Meditari.

The next step in the research is to develop a best practice audit approach for these areas. This will be done by:

1. developing a list of questions taking account of a thorough literature study of relevant audit guidance currently available in the UK, USA, Canada, Australia, New Zealand and South Africa;
2. conducting **confidential** structured interviews, based on the aforementioned list of questions, with the audit engagement executives of the five largest listed South African long-term insurers which collectively comprise approximately 80% of the industry based on both assets and net premium income;
3. combining the information from the literature study with the current practices of South African auditors (obtained by means of the **confidential** structured interviews) on an anonymous basis into a proposed best practice audit approach.

The results of the research will be available in the form of a PhD dissertation and I also intend to submit them for publication in the aforementioned accredited research journal, Meditari.

I trust that it is clear from the above that your valued participation in this project is critical to its success.

Confidentiality

I would like to emphasise that all information obtained during the structured interview will be treated as strictly confidential. Recordings and transcripts thereof and any notes taken during interviews will be used only by me and exclusively for the purpose of this research. In the unlikely event of my promoter, Prof Dave Lubbe, or internal or external examiners (whose names are available upon request from the Chairperson of the Department of Accountancy at the University of Stellenbosch) requesting access to this information, it will be made available *solely* to them, and only after I have obtained your permission to do so in writing. All information contained in the dissertation or publications will be on an anonymous basis.

Information regarding the structured interview

I would appreciate an opportunity to conduct a structured interview with you and the other members of your audit team whose presence you deem necessary.

The majority of the questions in the interview will focus on your overall audit approach or strategy for the audit of policy liabilities under insurance contracts (as defined in IFRS 4) and the related earnings of the particular client mentioned above, and on the last financial year for which you have completed the audit.

In order to allow you to prepare for the interview and to decide which audit team members should be present during the interview, I provide some information regarding the questions below.

Questions have been grouped into logical sections as set out in Appendix A. A number of questions will be asked in each of the sections. You should be able to provide responses to most of the questions without detailed reference to your audit working papers. However, where I felt that you might want to extract or prepare some information prior to the interview to optimise the interviewing process, I have provided an indication of such information under each of the section headings in Appendix A.

Questions will be asked in English, but responses can be provided in either English or Afrikaans.

Interviews will be recorded as evidence of the research and to allow me to refer back to responses where necessary. Should you have any concerns in this regard, please refer to the section headed “confidentiality” above.

Once all interviews have been conducted and responses analysed, some follow-ups may be required. It should be possible to conduct all follow-ups telephonically or by e-mail.

Request for your participation and commitment

As alluded to before, this valuable research will not be possible without your participation and commitment. I am fully reliant on your participation for the success of this project.

The nature of structured interviews is such that, although the interviewer works according to a basic structure, responses to certain questions may require prompting for further information. As a result, it is difficult to estimate the time commitment required from you and your team for participation in the interview.

As a general guideline, I would estimate that it should take no longer than 8 hours to complete the full interview, provided that the information requested in Appendix A is prepared beforehand.

As the individual ultimately responsible for the audit opinion, I would appreciate your presence in person throughout the interview. In the case of joint audits, depending on the allocation of responsibility for the audit work on policy liabilities and related earnings, you should also consider the

involvement of audit executives from the *joint auditors*. In addition, you might want to have your *audit manager(s)* and other *audit staff members* present during the interview or available by telephone throughout the interview. I would also suggest that you request any *actuarial experts* on your audit team, to be available by telephone throughout the interview.

I am aware that this is a significant request for your valuable time and therefore offer the following suggestions to minimise the duration of the interview and the extent of disruption caused thereby:

- I am willing to conduct the interview after working hours or on weekends if it would not be possible to afford me the time during working hours. The interview can be conducted either at my offices in Stellenbosch, or, with your permission, at the offices of your firm in the Western Cape, Johannesburg or Pretoria.
- As the interview is a relatively lengthy process, I have no objection to you allocating the responsibility for answering the questions on some of the areas mentioned in Appendix A, to one of the aforementioned parties, provided that (1) you are present to confirm the accuracy of the responses and (2) the relevant party is available on short notice when the stage of the interview concerned, is about to commence.
- Once the interview has been scheduled, I shall forward a copy of my comprehensive list of questions to you well ahead of the time, in order to allow to you review the questions in preparation for the interview.
- Should you believe that some of the questions can be answered by providing me with access to available information or by preparing documentation in response to certain questions prior to the interview, I am willing to review this information before or on the date of the interview instead of obtaining the information verbally from you.
- I suggest that you have the relevant audit working papers (manual and/or electronic) for the last audit of the client (the *overall audit approach/strategy* and *audit program* in particular) at hand during the interview for your reference. Please note that I do not intend to access these: they should merely be available for your own reference in answering some of my questions.

The aforementioned suggestions should result in a significant reduction in the time commitment required from you. I am available to discuss any further suggestions to limit the duration of the interviews with you.

Logistical arrangements

Appendix B contains information required to make arrangements regarding your participation in the interview and the date, time and venue for the interview.

Please complete Appendix B either manually or electronically and return it to me by no later than the end of Friday 22 October 2004. The relevant part(s) of Appendix B should please be completed and returned, regardless of whether you are willing to participate in the interview.

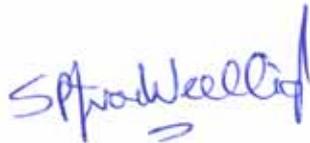
I shall contact you telephonically shortly after having received the completed Appendix B, to finalise arrangements for the interview.

Conclusion

Thank you for affording me the opportunity to provide you with some information regarding my research and, if applicable, for agreeing to participate in a structured interview. I appreciate the value of your time invested in this research and look forward to working with you in future. I trust that the results of this research will be valuable to you and your firm and the auditing profession as a whole.

Should you have any questions or require any further information regarding this research, please do not hesitate to contact me telephonically on (021) 808 3428 or 083 441 8026, by fax on (021) 886 4176 or by e-mail at pvw@sun.ac.za.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Pieter von Wielligh'.

**PROF PIETER VON WIELLIGH CA(SA)
DIVISIONAL HEAD: AUDITING
UNIVERSITY OF STELLENBOSCH**

A handwritten signature in black ink, appearing to read 'Dave Lubbe'.

**PROF DAVE LUBBE
PROMOTER / STUDY SUPERVISOR**

APPENDIX A

Basic structure of the proposed interview

Questions have been grouped into logical sections as set out below. Where I felt that you might want to extract or prepare some information prior to the interview to optimise the interviewing process, I have provided an indication such information under each of the section headings. Such information can be provided to me:

- verbally during the interview; or
- in written format *before* or *during* the interview; or
- as extracts from working papers or other documentation *before* or *during* the interview (refer to the section headed “Confidentiality” in the covering letter).

1. Business and Accounting Processes of a typical South African long-term insurer (these questions are not directly related to your client, but more general)

- List of accounting activities/processes specific to long-term insurance, which, in your opinion, exist in a typical South African long-term insurer.

2. General client information

- Insurance contracts (risk products) as approximate percentage of the total product mix of your client (measured as percentage of total policy liabilities).
- Extent of business reinsured (i.e. ceded to reinsurers) (measured as reinsurance premiums paid as percentage of total annual premiums received).
- Number of reinsurers used by your client as cessionaries.
- Extent of reinsurance accepted from other insurers (measured as percentage of total policy liabilities).
- Number of other insurers that make use of your client as reinsurer.
- Number of hours spent on the *external* audit of your client for a typical financial year (including experts (if any)).
- Number of *external* audit hours spent on the audit of policy liabilities under insurance contracts and the related earnings:
 - By auditors;
 - By actuaries employed by your local or international firm; and
 - By consulting actuaries independent of your firm, but engaged by your firm.
- Number of hours spent by the internal audit function of your client on the *internal* audit for a typical financial year.
- Number of *internal* audit hours spent by the internal audit function of your client specifically on the internal audit of policy liabilities under insurance contracts and the related earnings for a typical financial year.

3. Knowledge of the business

- If your audit planning involves enquiries from the statutory actuary of your client, the specific areas of enquiry.
- The *primary valuation method* (i.e. retrospective or prospective) used by your client for each of the following major insurance contract types:
 - Conventional non-participating;
 - Conventional participating;
 - Non-participating annuities;
 - Participating annuities; and
 - Universal life investment linked classified as insurance contracts.
- A brief description of the *profit entitlement policies* of your client for each of the following major insurance contract types:
 - Conventional non-participating;
 - Conventional participating;
 - Non-participating annuities;
 - Participating annuities; and
 - Universal life investment linked classified as insurance contracts.

4. Understanding of accounting processes and related internal controls (related to your specific client)

4.1 Underwriting

- Number of audit hours normally spent by your audit team reviewing (changes in) the underwriting strategies, policies and procedures of the client?

4.2 Information technology

4.3 Reinsurance

4.4 Actuarial assumptions

4.5 Actuarial source data

4.6 Actuarial calculations

4.7 Reporting valuation results

5. Materiality considerations

6. Nature, timing and extent of audit procedures (tests of control and substantive procedures)

6.1 Valuation: general

6.2 Valuation assumptions

6.3 Profit entitlements and earnings

6.4 Actuarial source data

- Proportion of your client's **total** policy liabilities that comprise participating (with profits) business (measured as % of **total** policy liabilities).
- Names and brief descriptions of suspense accounts which, in your opinion, have a significant impact on the valuation of insurance contracts.

- 6.5 Actuarial calculations
 - Name of the IT system used by your client for the prospective valuation process (e.g. Prophet, MoSes).
- 6.6 Validation of valuation result
- 6.7 Actuarial expert(s)
 - 6.7.1 Staffing of audit team
 - *If qualified actuaries employed as full time employees by your local or international firm are involved in the audit of your client*, a brief description of the salient features of the agreement(s) (if any) between the auditors and the firm actuaries on the audit team.
 - *If you make use of independent actuarial consulting services (i.e. not employees of your local or international firm) as part of the audit process on this client*, a brief description of the matters contained in the engagement letter of the consulting actuary.
 - 6.7.2 Statutory actuary
 - *If a formal record of understanding or terms of reference signed by the auditor and the statutory actuary is in place to provide structure to the communication between these parties*, a brief description of the matters covered thereby.
 - A brief description of the issues discussed with the statutory actuary and documented during the *planning* phase of the audit.
 - A brief description of the issues discussed with the statutory actuary and documented during the *execution* phase of the audit.
 - A brief description of the documentation produced by the actuarial department of the client, that is used for audit purposes.
 - *If you obtain a management representation from the statutory actuary*, a brief description of the matters covered thereby.
 - 6.7.3 General (assessing and documenting the work of the actuarial expert)
 - A brief description of the documentation regarding the use of an actuarial expert that is included in your audit working papers.
- 6.8 Analytical procedures
 - A brief description of the analytical procedures relating to policy liabilities and the related earnings that you perform during the audit.
 - A brief description of the market or industry information that you make use of in performing analytical procedures relating to policy liabilities and the related earnings.
 - A brief description of the *Key Performance Indicators* of the business relating to policy liabilities under insurance contracts and

the related earnings, as monitored by management, that you review as part of your analytical procedures.

6.9 Miscellaneous matters relating to the nature and extent of audit procedures

- A brief description of how you assess the financial strength of reinsurance cessionaries.
- A brief description of matters relevant to policy liabilities under insurance contracts and the related earnings, contained in the management representation obtained from general management.

6.10 Disclosure

6.11 Timing

- Types of audit procedures related to insurance contracts and the related earnings (if any), performed *prior to* year-end.
- Number of months prior to year-end that each of these types of procedures are performed.
- List of items relevant to policy liabilities under insurance contracts and the related earnings included in your subsequent events review.

7. Co-ordination and staffing

- *If your client's internal audit function performs internal audit work specifically related to the audit of policy liabilities under insurance contracts and the related earnings, briefly describe the scope of any work they perform specifically related to:*
 - Actuarial assumptions;
 - Source data used in the actuarial valuation process;
 - Calculations done as part of the actuarial valuation process; and
 - Reporting of the results of the actuarial valuation.
- A brief description of the different roles that exist within your audit team (e.g. partner, manager, IT specialist etc.)
- The number of team members who fulfil each of the roles described above.
- On average, the number of years of audit experience on long-term insurance clients of an audit team member in each of the following roles:
 - Partner;
 - Manager;
 - IT specialist;
 - Actuarial specialist;
 - Accounting and auditing technical specialist;
 - Long-term insurance industry specialist; and
 - Other (specify).
- On average, the number of hours per year an audit team member in each of the following roles spends receiving specialised training for auditors of long-term insurers:

- Partner;
- Manager;
- IT specialist;
- Actuarial specialist;
- Accounting and auditing technical specialist;
- Long-term insurance industry specialist; and
- Other (specify).

8. Other matters

- A description of how your audit strategy for insurance contracts and the related earnings has changed since the introduction of SAAS 620 – Using the work of an expert, in 1998.
- A description of any challenges and problems (if any) that you have experienced and/or are experiencing regarding the audit of the policy liabilities under insurance contracts and the related earnings, and how you solved/addressed or are solving/addressing each.
- A brief description of the respect(s) in which your audit strategy will be different for the audit of a smaller, non-listed South African long-term insurer.

APPENDIX B

LOGISTICAL ARRANGEMENTS FOR STRUCTURED INTERVIEW

Name: _____

Firm: _____

Contact telephone numbers:

Office: _____

Cellphone: _____

E-mail address: _____

Section A - Participation

A1. Are you willing to participate in the structured interview as described (mark appropriate block with "X")? Yes No

A1.1. If your answer to question A1 is "No", please provide a brief explanation on an attached sheet.

If your answer to question A1 is "No" and you have completed question A1.1, you are not required to complete the remainder of this document. Please return it to Prof SPJ von Wielligh at the return address indicated at the end of this document.

Section B – Date, time and venue

B1. Please indicate **5 possible dates between 1 November 2004 and 3 December 2004** and the relevant times (in slots of 8 hours) on each day that would suit you for the interview. Please remember that after hours and weekends are also available should they suit you better. For each time slot, please indicate a suitable venue as one of "Stellenbosch", "Western Cape office", "Johannesburg office" or "Pretoria office".

<u>Date</u>	<u>Time slot</u>	<u>Venue</u>
_____	: _____	: _____
_____	: _____	: _____
_____	: _____	: _____
_____	: _____	: _____

Please return this Appendix, duly completed, BY 22 OCTOBER 2004 by e-mail or fax to:

Prof Pieter von Wielligh
Department of Accountancy
University of Stellenbosch
E-mail: pvw@sun.ac.za
Fax: (021) 886 4176

APPENDIX E

Summarised *Curriculum Vitae* of researcher sent with introductory letter (the latter appears in Appendix D)

SUMMARISED CURRICULUM VITAE

SIMON PETRUS JOHANNES VON WIELLIGH

October 2004

1. PERSONAL INFORMATION

SURNAME: Von Wielligh
FULL NAMES: Simon Petrus Johannes
DATE OF BIRTH: August 15 1970
MARITAL STATUS: Single

2. ACADEMIC QUALIFICATIONS

TERTIARY EDUCATION

PERIOD: 1989 - 1994
UNIVERSITY: University of Stellenbosch
QUALIFICATIONS: B Acc (Cum Laude) (1991)
Hons B Acc (Cum Laude) (1992)
M Acc (1994) (Title: The opportunities for the use of Activity Based Techniques with specific reference to the South African long-term insurance industry)

3. OTHER QUALIFICATIONS

Pass Parts I and II of the Final Qualifying Examination of the Public Accountants' and Auditors' Board in 1993.

Completed training contract on January 3 1996.

4. WORK EXPERIENCE

<u>PERIOD:</u> 1993	Academic Articles: Department of Accountancy, University of Stellenbosch
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<u>PERIOD:</u> 1994 to 1995	Trainee Accountant: Ernst & Young, Cape Town
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<u>PERIOD:</u> 1996 to mid-2000	Assistant Audit Manager and later Senior Audit Manager in Financial Services Group: Ernst & Young
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National Technical Senior Manager: Ernst & Young

Subject Matter Expert of National Insurance and Asset Management Industry Focus Group: Ernst & Young

RESPONSIBILITIES:

Researching and responding to audit and accounting technical issues raised by audit partners and managers, as well as clients nationally.

External Examiner: Post Graduate Diploma in Accountancy - University of Cape Town.

Leader in deployment of new audit methodology nationally.

Audit Management.

Team leader in Due Diligence Investigation and Financial Projections Review performed by Reporting Accountants as part of Sanlam demutualisation, and member of core team of Reporting Accountants in the demutualisation process.

As part of the demutualisation process, I was responsible for performing the first actuarial audit of a life assurance company performed in South Africa in accordance with significant new auditing standards, specifically including the audit of the policy liabilities and the related earnings. As part of this process, I was responsible for liaison with the client's statutory actuary, independent international consulting actuaries and the in-house actuaries of the joint auditors of Sanlam. I have since consulted on this topic to audit teams of other insurers and have done a national presentation on the topic to the auditing and actuarial professions on behalf of the South African Institute of Chartered Accountants.

I have also consulted for a period of 5 months to a director of a financial services group embarking on a business transformation project. This assignment included acting as project manager on a number of client projects, providing input to management in the implementation of new initiatives, and

facilitation of workshops and meetings as part of the transformation project. I was also responsible for co-ordinating the team of Ernst & Young consultants involved in the project.

PERIOD:

mid-2000 to June 2001

Senior Lecturer in Auditing; Joint Head of Auditing: University of Stellenbosch.

Co-responsible for revising the Auditing curriculum from second year to postgraduate level and implementing the revised curriculum.

PERIOD:

July 2001 to date

Associate Professor and Head of Auditing: University of Stellenbosch

5. PUBLICATIONS

1. Auditors vs Actuaries: The Bean-Counter's First Perspective, Accountancy SA, February 2001, page 8-9.
2. Auditors vs Actuaries: The Bean-Counter's Second Perspective, Accountancy SA, March 2001, page 13-15.
3. Auditors vs Actuaries: The Bean-Counter's Final Perspective, Accountancy SA, April 2001, page 8-9.
4. AC116 – Is Everybody Ready?, Accountancy SA, May 2002, page 12-13 (co-authored with C West).
5. AC116 – May You Live in Interesting Times, Accountancy SA, June 2002, page 11-12 (co-authored with C West).
6. Can We Rely on Cash Flow Statements?, Accountancy SA, May 2003, page 16-18 (co-authored with W Steyn).
7. The Dilemma of Risk and Reward, Accountancy SA, September 2004, page 2 - 6 (co-authored with M Spies).
8. Auditing – Is Theory Adopting Practice?, Accountancy SA, October 2004, page 14 - 16.
9. To Test or Not To Test: Internal Control Audit Strategies, Accountancy SA (accepted for publication).
10. High Inherent Risk Elements in the Financial Statements of Listed South African Long-Term Insurers, Meditari, Accountancy Journal, Volume 12, No 1.

6. PAPERS DELIVERED AT CONFERENCES

1. AC116 – Is Everybody Ready? - Southern African Accounting Association Mini-Conference, University of Cape Town, Cape Town, 2002 (co-authored with C West)
2. AC116 – Is Everybody Ready? – Southern African Accounting Association Biennial International Conference, Port Elizabeth, 26-28 June 2002 (co-authored with C West)

3. Comparability, Relevance and Understandability of Financial Reporting by Listed South Africa Long-Term Insurers, Southern African Finance Association 12th Annual Conference, Cape Town, 22-24 January 2003.

APPENDIX F

**Covering e-mail for research questionnaire relating to overall
audit strategies (questionnaire appears in Appendix G)**

From: Von Wielligh Spj, Prof <pvw@sun.ac.za>
Sent: 14 November 2004 02:40 PM
To: [E-mail addresses deleted to protect confidentiality of respondents]
Cc: Dave Lubbe (E-mail); Dave Lubbe (E-mail 2);
'philip.strachan@za.ey.com'
Subject: PhD Research Project - Questionnaire for completion

Importance: High

Addressees and relevant client*

* - Contents of this section deleted to protect confidentiality of respondents

Dear Audit Partner/Director

KINDLY ACKNOWLEDGE RECEIPT OF THIS E-MAIL WITH ATTACHMENT BY RETURN E-MAIL.

My e-mail entitled "Further contact: PhD Research Project - Pieter von Wielligh" dated 14 October 2004 and your response thereto refer. Thank you for agreeing to participate in the research and for offering your valuable time to assist in this important project.

As part of the aforementioned communication, I provided a description of the process of "structured interviews" that I intended to follow at that stage to collect the necessary data. Subsequently, a exploratory pilot run provided strong evidence that the quality of the questions had evolved to a point where a typical questionnaire format would now be more appropriate and convenient for both myself as researcher and you as respondent.

My intention is therefore to collect the data required from you by means of the attached questionnaire. I shall analyse your response upon receipt thereof, and this process will yield a number of specific matters that I would then like to follow up with you in person in a relatively short meeting with a maximum duration of approximately 2 hours in December 2004 or January 2005. This strategy has the following benefits:

- You have more time to provide me with quality data, and this time is flexible;
- It provides you the opportunity to delegate the responsibility for answering some of the questions to other team members (although you are required to review and approve the final product before returning the completed questionnaire to me); and
- My "face time" with you should be much more focused and valuable, as I would have had the opportunity to analyse the data provided to me in the questionnaire.

Against this background, I attach the questionnaire mentioned above.

Please read the instructions and information provided on the first page carefully.

The columns of interest to you are the column entitled "Question", which contains the question, and the column entitled "Answer", which contains either a list of options from which to select answers, or a blank space indicating that the question is an "open question" for which the answer is expected to be in open or free narrative format. With regard to the latter blank spaces, please

do not leave any of these spaces blank during completion of the questionnaire - kindly insert either a "Not applicable" answer, or alternatively, should you wish to rather discuss the answer with me in person during the follow-up interview, indicate as such in the blank space.

Please ignore the column entitled "Source(s)" and the last column on the right which are for administrative use by myself.

The qualitative content of your narrative answers is very important in the research. Bearing in mind the objective of the research, namely to develop a best practice audit strategy for insurance contracts and the related earnings, any comments or elaborations on matters which you believe to be important in addition to the specific scope of the questions, are therefore more very welcome. These can be provided either in the questionnaire or on additional pages.

Should you have any questions or require clarification of any aspects relating to the questionnaire or the research project, please do not hesitate to contact me by any of the means listed below. In particular, if you have difficulty with interpreting any of the questions, please do not hesitate to contact me.

Please remember to sign the declaration on the last page of the questionnaire after printing it and before mailing it to me.

Kindly return the completed questionnaire to reach me BY MAIL as soon as possible, but by FRIDAY 3 DECEMBER 2004 at the latest (address details appear in the questionnaire). To allow for time in the postal service, it should be mailed approximately 2 days before this date. Should you not be able to meet this deadline, please inform me immediately so that we can make alternative arrangements.

Thank you again for the valuable time invested in this research. I look forward to receiving your completed questionnaires and meeting with you thereafter.

KINDLY ACKNOWLEDGE RECEIPT OF THIS E-MAIL WITH ATTACHMENT BY MEANS OF RETURN E-MAIL.

Yours sincerely

Prof SPJ von Wielligh CA(SA)
Afdelingshoof: Ouditkunde / Divisional Head: Auditing
Dept Rekeningkunde/Dept of Accountancy
Universiteit van Stellenbosch/University of Stellenbosch
Privaat Sak X1 / Private Bag X1
Matieland, 7602
Tel: +27(0)21 808 3846
Fax: +27(0)21 886 4176
Email: pvw@sun.ac.za
Website: www.sun.ac.za/accounting

APPENDIX G

Research questionnaire relating to overall audit strategies

KEY TO “Source(s)” COLUMN OF QUESTIONNAIRE

This page contains a key to the main acronyms and summarised terminology used in the column entitled “Source(s)” of the questionnaire in this appendix, where these are not self-explanatory. Where the items are used in the questionnaire, they are mostly followed by references to the relevant page or paragraph numbers in the particular document. References in brackets in the “Description” column in the table below refer to the source list of this dissertation.

Acronym / Summarised term	Description
AU336	AICPA AU Section 336 (AICPA, 1994)
AuG15	CICA AuG-15: <i>Audit of actuarial liabilities of life insurance enterprises</i> (CICA, 1993)
AUS[Number]	Australian auditing standard [number] issued by the Australian Accounting Research Foundation
DP6	SAICA Discussion Paper 6: <i>Audit risk and materiality</i> (SAICA, 1984)
EY Training material	Unpublished in-house training material of Ernst & Young
ICANZ606	ICANZ Auditing Standard No. 606 (ICANZ, 1998b)
IFRS4	IASB International Financial Reporting Standard 4: <i>Insurance contracts</i> (IASB, 2004b)
LL Risk Doc	Unpublished confidential in-house material of a “Big Four” auditing firm provided to the author on a confidential basis
PGN[Number]	ASSA Professional Guidance Note [Number]
PN20	APB Practice Note 20 (APB, 1999)
PvW’s articles in Acc. SA	Three related articles on the auditor’s relationship with the actuary published in <i>Accountancy SA</i> (Von Wielligh, 2001a, 2001b and 2001c)
S Nagle	Unpublished internal e-mail provided to the author by S. Nagle of Ernst & Young (Nagle, 2002)
SA Guide	<i>SAICA Audit Guide on Long-Term Insurance</i> (SAICA, 1998a)
SA Guide App B	Appendix B of the <i>SAICA Audit Guide on Long-Term Insurance</i> (SAICA, 1998a)
SA Guide2	SAICA Audit Guide entitled <i>The Auditor’s Relationship with the Statutory Actuary in the Long-Term Insurance Industry</i> (SAICA, 1998b)
SAAS[Number]	South African Auditing Standard [number] as issued by the Public Accountants and Auditors Board. As the questionnaire was finalised before the decision by the Public Accountants and Auditors board to adopt International Standards on Auditing as the prevailing auditing standards in South Africa as from 1 January 2005 (refer to PAAB, 2004), references in the questionnaire are still to the South African standards prevailing at the time.
Sanlam 2003 AFS	Sanlam Limited Annual Report: 31 December 2003 (Sanlam, 2003).
Sect[Number] and Section [Number]	Section [number] of the Members’ Handbook of CICA
UKSAS[Number]	United Kingdom APB Statement of Auditing Standards [number]
USLHI	<i>AICPA Audit and Accounting Guide – Life and Health Insurance Entities</i> (AICPA, 2003)

QUESTIONNAIRE: AUDIT APPROACHES

GENERAL INFORMATION

INSTRUCTIONS:

1. This questionnaire can be completed either electronically or in hard copy format.
2. The completed questionnaire must be printed, the declaration on the last page signed by the engagement partner and then submitted by mail in hard copy format **BY NO LATER THAN FRIDAY 3 DECEMBER 2004** to:

Prof SPJ von Wielligh
Department of Accountancy
University of Stellenbosch
Van der Sterr Building 2047
Private Bag X1
MATIELAND
7600

3. Please retain a copy of the questionnaire as submitted for your own records and for use during follow-up discussions.
4. Should the space provided be insufficient to answer a question, additional pages can be added to the questionnaire. Should this be the case, please ensure that answers on additional pages are clearly cross-referenced to the particular question number.
5. The last page of the questionnaire includes space to indicate any problems encountered during completion.
6. Please do not leave the answer to any question blank. Where relevant, please either insert a "Not applicable" answer or, should you wish to rather discuss the answer with me in person during a follow-up interview, please indicate as such in the blank space provided.

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETION OF THE QUESTIONNAIRE:

1. The focus of this questionnaire is on policy liabilities under "insurance contracts" as defined in IFRS4 – Insurance Contracts, and the related earnings from long-term insurance activities. These contracts include individual life contracts and employee benefits contracts. IFRS4 contains the following definition of an insurance contract:

"A contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder".

2. Throughout this questionnaire:
 - 2.1 **Except for Questions 180 – 185**, the term "*statutory actuary*" refers to the statutory actuary of the insurer appointed in terms of Section 20 or 21 of the Long-term Insurance Act 1998, **solely in his/her capacity as employee/member of management of the insurer** and **not** as a specialist/expert member of the audit team; and
 - 2.2 except where otherwise obvious from the context of a question, the term "*you*" refers to the audit team and not to the individual answering the question; and
 - 2.3 except where otherwise obvious from the context of a question, the term "*auditor*" refers to the external auditor(s) responsible for expressing an audit opinion on the financial statements of the insurer; and
 - 2.4 the scope of the questionnaire **includes** the audit of the *annual financial statements* of the insurer and **excludes** the audit of the *Regulatory Return* of the insurer insofar as it differs from that of the annual financial statements.
3. Some long-term insurers maintain some of the data used in the process of valuation of policy liabilities and the application of shareholders' profit entitlements on the same policy administration systems on which accounting transactions such as premiums and policy benefits are recorded, whereas others maintain this data on separate systems in the actuarial department. Where questions related to this data is answered, the particular structure of your client in this regard should be borne in mind.

Throughout the questionnaire, the term "*in-force database*" refers to the policy administration systems, whereas the term "*valuation masterfiles*" refers to the data used in the actuarial valuation process, which may be the same as the in-force database, or different as explained above.

QUESTIONNAIRE: AUDIT APPROACHES

GENERAL INFORMATION

1. Client company name: _____

2. Financial year mainly referred to in completing questionnaire: _____

3. Particulars of person(s) responsible for completing questionnaire:

Name & demographic	Firm	Position	Tel (W)	Tel (Cell)	E-mail
Name: _____ Years experience: • on this client: _____ • on audits of long-term insurers: _____					
Name: _____ Years experience: • on this client: _____ • on audits of long-term insurers: _____					
Name: _____ Years experience: • on this client: _____ • on audits of long-term insurers: _____					
Name: _____ Years experience: • on this client: _____ • on audits of long-term insurers: _____					
Name: _____ Years experience: • on this client: _____ • on audits of long-term insurers: _____					

4. As agreed regarding confidentiality, no references to your name or the name of your firm will be made in the dissertation without your specific consent. I would, however, like to acknowledge your contribution to this research in my dissertation. Do you agree to the use of your name and the name of your firm in the acknowledgement only?

Yes

No

QUESTIONNAIRE: AUDIT APPROACHES

PART A – BUSINESS AND ACCOUNTING PROCESSES

Nr	Question	Answer	Source(s)
1	<p>The next column contains a number of industry-specific mega business processes with the boundaries (starting point and ending point) of each between brackets. Support processes are excluded. Which of these processes comprise the value chain of a typical South African long-term insurer? Please highlight each relevant process and add any additional processes including a brief indication of their boundaries.</p> <p>Also, please order the processes selected above, in a logical order to form the value chain of a typical South African long-term insurer. To do this, please insert a consecutive number in the block representing each process, where 1 = the first process in the value chain.</p>	<p>Product development (concept > ready for sale) NR: _____</p> <hr/> <p>Marketing and distribution (ready for sale > sold; commission paid) NR: _____</p> <hr/> <p>New business processing (sold > in-force) NR: _____</p> <hr/> <p>Policy administration (in-force > termination) NR: _____</p> <hr/> <p>Investment management (cash received > investment made/cash out) NR: _____</p> <hr/> <p>Claims handling (claim reported > claim settled; policy out of force) NR: _____</p> <hr/> <p>Other – specify NR: _____</p>	EY training material
2	<p>What are the objectives of each of the processes in question 1? Please highlight the relevant objectives and add any additional objectives per process.</p>	<p>Product Development: Identify new opportunities; Design products; Product pricing; Specify investment mandates; Monitor quality of new product</p> <hr/> <p>Marketing & Distribution: Develop revenue plans; Select optimal distribution channels; Monitor sales results; Develop & manage agent/broker relationships</p> <hr/> <p>New Business Processing: Underwriting; Approve & issue policy with record set up</p> <hr/> <p>Policy Administration: Policy records accurate and complete; Record premiums; Collect premiums; Maintain policy records</p> <hr/> <p>Investment Management: Invest cash in accordance with mandates; Compliance; Valuation; Investment income; Performance reporting</p> <hr/> <p>Claims Handling: Validate claims; Settle claims; Record payments; Update in-force database)</p> <hr/> <p>Other (insert from question 1)</p>	EY training material

QUESTIONNAIRE: AUDIT APPROACHES

PART A – BUSINESS AND ACCOUNTING PROCESSES

Nr	Question	Answer	Source(s)														
3	Which of the business processes in question 2 have a direct impact on policy liabilities under insurance contracts and the related earnings? Please highlight the relevant processes.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Product development</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Marketing & Distribution</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">New Business Processing</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Policy Administration</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Investment Management</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Claims Handling</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other (insert from question 1)</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Product development		Marketing & Distribution		New Business Processing		Policy Administration		Investment Management		Claims Handling		Other (insert from question 1)		
Product development																	
Marketing & Distribution																	
New Business Processing																	
Policy Administration																	
Investment Management																	
Claims Handling																	
Other (insert from question 1)																	
4	Do you perceive the Actuarial Close Process (performance of valuation and reporting of results thereof) to be a significant support process in a typical South African long-term insurer?	<input type="checkbox"/> Yes <input type="checkbox"/> No															
5	Which industry-specific accounting activities/processes exist in a typical South African long-term insurer? Please highlight the relevant answers and add any additional activities/processes.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Underwriting/New Business</td></tr> <tr><td style="padding: 2px;">Renewals/Premium collection</td></tr> <tr><td style="padding: 2px;">Reinsurance</td></tr> <tr><td style="padding: 2px;">Commissions</td></tr> <tr><td style="padding: 2px;">Policy records</td></tr> <tr><td style="padding: 2px;">Masterfile maintenance</td></tr> <tr><td style="padding: 2px;">Claims and maturities</td></tr> <tr><td style="padding: 2px;">Policy loans and surrenders</td></tr> <tr><td style="padding: 2px;">Lapses and reinstatements of policies</td></tr> <tr><td style="padding: 2px;">Investments</td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Underwriting/New Business	Renewals/Premium collection	Reinsurance	Commissions	Policy records	Masterfile maintenance	Claims and maturities	Policy loans and surrenders	Lapses and reinstatements of policies	Investments	Other – specify		SA Guide.51-.55; PN20:SAS300.9-.10; USLHI:8.94(b)		
Underwriting/New Business																	
Renewals/Premium collection																	
Reinsurance																	
Commissions																	
Policy records																	
Masterfile maintenance																	
Claims and maturities																	
Policy loans and surrenders																	
Lapses and reinstatements of policies																	
Investments																	
Other – specify																	

QUESTIONNAIRE: AUDIT APPROACHES

PART A – BUSINESS AND ACCOUNTING PROCESSES

Nr	Question	Answer	Source(s)
6	Which accounting activities/processes in question 5 have a direct impact on policy liabilities under insurance contracts and the related earnings ? Please highlight the relevant answers and add any additional activities/processes.	Underwriting/New Business Renewals/Premium collection Reinsurance Commissions Policy records Masterfile maintenance Claims and maturities Policy loans and surrenders Lapses and reinstatements of policies Investments Other – specify	

QUESTIONNAIRE: AUDIT APPROACHES

PART B0 – GENERAL INFORMATION

Nr	Question	Answer	Source(s)	
1	Does your client have to comply with the financial reporting requirements of any country other than South Africa? If “Yes”, please indicate which country.	<input type="checkbox"/> Yes – indication <input type="checkbox"/> No		
2	Describe the treatment of acquisition costs by your client. Please highlight the relevant answer or add a short description of the treatment.	<input type="checkbox"/> Expensed in year of inception and not explicitly recovered from policyholder <input type="checkbox"/> Expensed in year of inception but partially recovered from policyholder over policy term in the form of fees for which an “unrecouped expense account” debtor is created <input type="checkbox"/> Deferred, recognised as asset or negative liability and amortised <input type="checkbox"/> Other- please specify		Ref Q 191-193
3	Do you express your audit opinion on this client solely in accordance with South African Auditing Standards? If “No”, please indicate which other standards.	<input type="checkbox"/> Yes <input type="checkbox"/> No – indication		
4	How would you describe the overall audit approach or strategy that you follow for policy liabilities under insurance contracts and the related earnings? Please highlight the relevant answer or add a short description of your approach or strategy.	<input type="checkbox"/> Balance sheet based <input type="checkbox"/> Risk based <input type="checkbox"/> Combined tests of controls and substantive tests <input type="checkbox"/> Purely substantive <input type="checkbox"/> Other – specify		

QUESTIONNAIRE: AUDIT APPROACHES

PART B0 – GENERAL INFORMATION

Nr	Question	Answer	Source(s)																					
5	Which steps form part of the overall audit strategy that you follow for policy liabilities under insurance contracts and the related earnings? Please highlight the relevant answers and add any additional steps.	<table border="1"> <tr><td>Obtaining an understanding of the role and responsibilities of the statutory actuary</td></tr> <tr><td>Obtaining knowledge of the business</td></tr> <tr><td>Obtaining an understanding of control environment and control systems</td></tr> <tr><td>Developing a detailed audit approach/strategy</td></tr> <tr><td>Forming a conclusion</td></tr> <tr><td>Other – specify</td></tr> </table>	Obtaining an understanding of the role and responsibilities of the statutory actuary	Obtaining knowledge of the business	Obtaining an understanding of control environment and control systems	Developing a detailed audit approach/strategy	Forming a conclusion	Other – specify	AuG15.15															
Obtaining an understanding of the role and responsibilities of the statutory actuary																								
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Developing a detailed audit approach/strategy																								
Forming a conclusion																								
Other – specify																								
6	What approximate percentage does insurance contracts (risk products) currently represent of the total product mix of your client (measured as % of total policy liabilities)? Please highlight the relevant answer.	<table border="1"> <tr><td>0-25%</td></tr> <tr><td>26%-50%</td></tr> <tr><td>51%-75%</td></tr> <tr><td>76%-100%</td></tr> </table>	0-25%	26%-50%	51%-75%	76%-100%																		
0-25%																								
26%-50%																								
51%-75%																								
76%-100%																								
7	<p>What is the primary valuation method used by your client for each of the following major insurance contract types:</p> <ul style="list-style-type: none"> - Conventional non-participating - Conventional participating - Non-participating annuities - Participating annuities - Universal life investment linked classified as insurance contracts - Investment return guarantees and/or embedded derivatives included in products <p>Please highlight the relevant answers.</p> <p>(Key: N/A = client has no such product; R = Retrospective valuation method; P = Prospective valuation method)</p>	<table border="1"> <tr><td>N/A</td><td>R</td><td>P</td></tr> <tr><td>N/A</td><td>R</td><td>P</td></tr> <tr><td>N/A</td><td>R</td><td>P</td></tr> <tr><td>N/A</td><td>R</td><td>P</td></tr> <tr><td>N/A</td><td>R</td><td>P</td></tr> <tr><td>N/A</td><td>R</td><td>P</td></tr> <tr><td>N/A</td><td>R</td><td>P</td></tr> </table>	N/A	R	P	N/A	R	P	N/A	R	P	N/A	R	P	N/A	R	P	N/A	R	P	N/A	R	P	
N/A	R	P																						
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N/A	R	P																						

QUESTIONNAIRE: AUDIT APPROACHES

PART B0 – GENERAL INFORMATION

Nr	Question	Answer	Source(s)	
8	Briefly describe the profit entitlement policies of your client for each of the following major insurance contract types: - Conventional non-participating - Conventional participating - Non-participating annuities - Participating annuities - Universal life investment linked classified as insurance contracts			
9	How regularly does your client monitor the appropriateness of the actuarial valuation assumptions? Please highlight the relevant answer.	<input type="checkbox"/> More often than once per annum <input type="checkbox"/> Annually <input type="checkbox"/> Less often than once per annum <input type="checkbox"/> Don't know	LL Risk Doc	Ref Q44
10	In setting the relevant assumptions, does your client make any adjustments to the available generally accepted actuarial tables (e.g. based on own actual experience)?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	In questions 11 - 16, the term "reinsurance" is defined as the transfer of a portion of insurance risk under an insurance contract, to another party, namely the reinsurer.			
11	What extent of your client's business is reinsured (i.e. ceded to reinsurers) (measured as reinsurance premiums paid as percentage of total annual premium income)? Please highlight the relevant answer.	<input type="checkbox"/> <10% <input type="checkbox"/> 10% – 25% <input type="checkbox"/> 26% - 50% <input type="checkbox"/> >50%		
12	How many reinsurers are used by your client as cessionaries (i.e. reinsurers to whom insurance risk is transferred by your client)? Please highlight the relevant answer.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 or more	AuG15:59	
13	What extent of your client's in-force policies are reinsurance policies (i.e. reinsurance assumed from other insurers) (measured as % of total policy liabilities)? Please highlight the relevant answer.	<input type="checkbox"/> <10% <input type="checkbox"/> 10% – 25% <input type="checkbox"/> 26% - 50% <input type="checkbox"/> >50%		
14	How many other insurers make use of your client as reinsurer (i.e. how many other insurers transfer insurance risk to your client)? Please highlight the relevant answer.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 or more	AuG15:59	

QUESTIONNAIRE: AUDIT APPROACHES

PART B0 – GENERAL INFORMATION

Nr	Question	Answer	Source(s)	
15	What kind(s) of ceded reinsurance arrangements do(es) your client have in place (i.e. ceded to other insurers)? Please highlight the relevant answer(s).	<input type="checkbox"/> No reinsurance cede or accepted <input type="checkbox"/> Treaty <input type="checkbox"/> Facultative <input type="checkbox"/> Don't know		
16	What kind(s) of accepted reinsurance arrangements do(es) your client have in place (i.e. accepted from other insurers)? Please highlight the relevant answer(s).	<input type="checkbox"/> No reinsurance cede or accepted <input type="checkbox"/> Treaty <input type="checkbox"/> Facultative <input type="checkbox"/> Don't know		
17	Which functions significant to policy liabilities and the related earnings, are administered by third party administrators? Please highlight the relevant answer(s) and add any additional functions.	<input type="checkbox"/> Underwriting <input type="checkbox"/> Investment management <input type="checkbox"/> Claims administration <input type="checkbox"/> Other – specify	USLHI:5.49(n)	
18	If any outsourced areas were highlighted in question 17, please briefly describe your audit strategy for obtaining audit evidence specifically from each outsourced area.		USLHI:5.49(n)	
19	Please provide a brief description of the recording of transactions in the policy administration system (“in-force database”) and the valuation data (“valuation masterfile”) (both these terms are described in point 3 in the information on the first page of this questionnaire). For example, when a transaction (e.g. a claim) is recorded in the in-force database: <ul style="list-style-type: none"> • is the same transaction also posted to the valuation masterfile, where a transaction record is built up for each policy record, or • is the transaction posted only to the in-force database and not recorded as a transaction on the valuation masterfile (in this case, the data used in the valuation would be extracted from the in-force database at the time of the valuation)? 			

QUESTIONNAIRE: AUDIT APPROACHES

PART B0 – GENERAL INFORMATION

Nr	Question	Answer	Source(s)	
20	How many hours are spent on the <i>external audit</i> of your client for a typical financial year (including experts (if any))?			
21	<p><i>(When answering this question, please include time spent on the audit of the policy administration systems in as far as they are relevant to valuation of policy liabilities and the related earnings.)</i></p> <p>How many of the external audit hours in question 20 are spent specifically on the audit of policy liabilities under insurance contracts and the related earnings:</p> <ul style="list-style-type: none"> - by auditors - by actuaries employed by your local or international firm - by consulting actuaries independent of your firm, but engaged by your firm? 			
22	How many hours are spent by your client's internal audit function (in-house and/or outsourced) on the <i>internal audit</i> of your client for a typical financial year?			
23	<p><i>(When answering this question, please include time spent on the internal audit of the policy administration systems in as far as they are relevant to valuation of policy liabilities and the related earnings.)</i></p> <p>How many of the internal audit hours in question 22 are spent specifically on the audit of policy liabilities under insurance contracts and the related earnings?</p>			Ref Q 211- 215
24	Is the statutory actuary of your client a full time employee of the client company? If "No", please elaborate.	<p style="text-align: center;"><input type="checkbox"/> Yes</p> <p style="text-align: center;"><input type="checkbox"/> No – elaborate</p>	USLHI:5.47; AUS606.12; ICANZ606.8; AICPA AU336.03	

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)
25	How should an understanding of the products sold by client be obtained or updated by the auditor? Please highlight the relevant answer(s) and add any additional steps.	Discussion with client – specify job title Prior Financial Statements Reading of standard policy contracts Reading of product specifications Reading of actuarial renewal bases Reading of actuarial claims bases Other – specify	SAAS310;SAAS315; SA Guide.50; SA Guide App B.10, .16; PN20:SAS120.19 ; PN20:SAS200.1; PN20:SAS210.4; PN20:SAS300.5; AuG15.25; USLHI:4.07; USLHI5.12(i); AuG15.27

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)																		
26	Of which characteristics of each product type (new and existing products) should the auditor obtain an understanding? Please highlight the relevant answer(s) and add any additional characteristics.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Target market</td></tr> <tr><td>Underwriting requirements incl. reinsurance arrangements</td></tr> <tr><td>Investment return guarantees</td></tr> <tr><td>Policy Terms</td></tr> <tr><td>Benefits</td></tr> <tr><td>Related/underlying investments</td></tr> <tr><td>Commission structure</td></tr> <tr><td>Administration costs</td></tr> <tr><td>Fee structure</td></tr> <tr><td>Mortality/ morbidity/ maturity profile</td></tr> <tr><td>Premium structure</td></tr> <tr><td>Regulatory requirements</td></tr> <tr><td>Volumes sold</td></tr> <tr><td>Expected profitability</td></tr> <tr><td>Valuation basis</td></tr> <tr><td>Profit entitlement policies</td></tr> <tr><td>Other - specify</td></tr> </table>	Target market	Underwriting requirements incl. reinsurance arrangements	Investment return guarantees	Policy Terms	Benefits	Related/underlying investments	Commission structure	Administration costs	Fee structure	Mortality/ morbidity/ maturity profile	Premium structure	Regulatory requirements	Volumes sold	Expected profitability	Valuation basis	Profit entitlement policies	Other - specify	SAAS310;SAAS315; SA Guide.50; SA Guide App B.10, .16; PN20:SAS120.19 ; PN20:SAS200.1; PN20:SAS210.4; PN20:SAS300.5; AuG15.25; USLHI:4.07; USLHI5.12(i); AuG15.27	
Target market																					
Underwriting requirements incl. reinsurance arrangements																					
Investment return guarantees																					
Policy Terms																					
Benefits																					
Related/underlying investments																					
Commission structure																					
Administration costs																					
Fee structure																					
Mortality/ morbidity/ maturity profile																					
Premium structure																					
Regulatory requirements																					
Volumes sold																					
Expected profitability																					
Valuation basis																					
Profit entitlement policies																					
Other - specify																					
27	Should audit planning involve enquiries from the statutory actuary in his/her capacity as employee of the client ?	<input type="checkbox"/> Yes <input type="checkbox"/> No																			
28	If the answer to question 27 was “Yes”, please state specific areas of enquiry.																				
29	If the answer to question 27 was “Yes”, which audit team member(s) (staff level(s)) should conduct this discussion? Please highlight the relevant answer(s).	<input type="checkbox"/> Partner <input type="checkbox"/> Manager <input type="checkbox"/> Senior <input type="checkbox"/> Junior <input type="checkbox"/> Actuarial expert	PN20:SAS200.2																		

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)								
30	Do you believe that it is ever appropriate for the auditor of a listed South African long-term insurer to rely solely on the statutory actuary of the client as a specialist, in performing the audit of policy liabilities under insurance contracts and the related earnings (i.e. using no other actuarial specialist(s) on the audit team)?	<div style="display: flex; justify-content: space-around; align-items: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </div>		Ref Q 167 - 179							
31	<p>If the answer to question 30 was “Yes”, please describe under which circumstances you believe this reliance to be appropriate.</p> <p>If the answer to question 30 was “No”, please answer questions 32 and 33 as “Not applicable”.</p>										
32	How should the auditor assess the expertise and competence of the statutory actuary? Please highlight the relevant answer(s) and add any additional methods.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Not applicable</td> </tr> <tr> <td style="padding: 2px;">Membership in good standing of ASSA</td> </tr> <tr> <td style="padding: 2px;">Enquiries from other parties regarding reputation etc.– specify</td> </tr> <tr> <td style="padding: 2px;">Publications</td> </tr> <tr> <td style="padding: 2px;">Other – specify</td> </tr> </table>	Not applicable	Membership in good standing of ASSA	Enquiries from other parties regarding reputation etc.– specify	Publications	Other – specify	SA Guide2.37 - .39; S Nagle:8; USLHI.5.45; AUS524.17-.18; Sect5049.29; Sect5365.13-.18; ICANZ606.13-.14; UKSAS520.10-.11; AICPA AU336.08-.09			
Not applicable											
Membership in good standing of ASSA											
Enquiries from other parties regarding reputation etc.– specify											
Publications											
Other – specify											
33	What factors should the auditor consider to assess the objectivity and integrity of the statutory actuary? Please highlight the relevant answer(s) and add any additional factors.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Not applicable</td> </tr> <tr> <td style="padding: 2px;">Company performance related element of remuneration</td> </tr> <tr> <td style="padding: 2px;">Significance of shares and options (financial interest) held</td> </tr> <tr> <td style="padding: 2px;">Existence of actuarial subcommittee of board comprising competent independent non-executive directors with actuarial experience</td> </tr> <tr> <td style="padding: 2px;">Reporting lines</td> </tr> <tr> <td style="padding: 2px;">Past behaviour</td> </tr> <tr> <td style="padding: 2px;">Subsequent events as proof of non-bias</td> </tr> </table>	Not applicable	Company performance related element of remuneration	Significance of shares and options (financial interest) held	Existence of actuarial subcommittee of board comprising competent independent non-executive directors with actuarial experience	Reporting lines	Past behaviour	Subsequent events as proof of non-bias	SA Guide .40-.43; AUS524.19-.23; Sect5049.31-.37; Sect5365.13-.18; ICANZ606.15-.16; AICPA AU336.08-.09	
Not applicable											
Company performance related element of remuneration											
Significance of shares and options (financial interest) held											
Existence of actuarial subcommittee of board comprising competent independent non-executive directors with actuarial experience											
Reporting lines											
Past behaviour											
Subsequent events as proof of non-bias											

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)							
34	What information should the auditor obtain regarding (changes in) characteristics of policyholders per product type? Please highlight the relevant answer(s) and add any additional information.	<table border="1"> <tr><td>None</td></tr> <tr><td>Geographic location</td></tr> <tr><td>Industry (Employee Benefits business only)</td></tr> <tr><td>Income bracket (population segment)</td></tr> <tr><td>Lapse/surrender rates</td></tr> <tr><td>Other – specify</td></tr> </table>	None	Geographic location	Industry (Employee Benefits business only)	Income bracket (population segment)	Lapse/surrender rates	Other – specify	SA Guide.50; AuG15.26	
None										
Geographic location										
Industry (Employee Benefits business only)										
Income bracket (population segment)										
Lapse/surrender rates										
Other – specify										
35	How should the auditor obtain/update his/her understanding of the bases of valuation of policy liabilities under insurance contracts? Please highlight the relevant answer(s) and add any additional methods.	<table border="1"> <tr><td>Discussion with statutory actuary</td></tr> <tr><td>Reading of actuarial documentation</td></tr> <tr><td>Review of minutes of board meetings</td></tr> <tr><td>Other – specify</td></tr> </table>	Discussion with statutory actuary	Reading of actuarial documentation	Review of minutes of board meetings	Other – specify	SAAS310;SAAS 315; SA Guide.50			
Discussion with statutory actuary										
Reading of actuarial documentation										
Review of minutes of board meetings										
Other – specify										
36	How should the auditor obtain/update his/her understanding of the profit entitlement policies of the client? Please highlight the relevant answer(s) and add any additional methods.	<table border="1"> <tr><td>Not necessary</td></tr> <tr><td>Discussion with statutory actuary</td></tr> <tr><td>Reading of actuarial documentation</td></tr> <tr><td>Review of minutes of board meetings</td></tr> <tr><td>Other – specify</td></tr> </table>	Not necessary	Discussion with statutory actuary	Reading of actuarial documentation	Review of minutes of board meetings	Other – specify			
Not necessary										
Discussion with statutory actuary										
Reading of actuarial documentation										
Review of minutes of board meetings										
Other – specify										
37	Which specific economic factors that affect lapse and surrender rates and expected future benefit payment patterns, should the auditor consider? Please highlight the relevant answer(s) and add any additional factors.	<table border="1"> <tr><td>Interest rates</td></tr> <tr><td>Inflation</td></tr> <tr><td>Exchange rates</td></tr> <tr><td>Investment market levels</td></tr> <tr><td>Other – specify</td></tr> </table>	Interest rates	Inflation	Exchange rates	Investment market levels	Other – specify	SAAS310;SAAS 315; USLHI:9.20(a); SA Guide.50 & App B.16; AuG15.26-27		
Interest rates										
Inflation										
Exchange rates										
Investment market levels										
Other – specify										

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)																	
38	How should the auditor gain knowledge of the relevant Professional Guidance Notes issued by the Actuarial Society of South Africa? Please highlight the relevant answer(s) and add any additional methods.	Reading Discussion with statutory actuary Discussion with actuarial expert on audit team Training courses Other – specify	SAAS310;SAAS 315; AuG15.18-.19; SA Guide App B:.06-.07																	
	Key for questions 39 – 43: <ul style="list-style-type: none"> • Not req'd = Not required; • Basic = Awareness and elementary understanding as a layman; • Sufficient = Sufficient to understand and interpret impact on the financial statements; and • Excellent = Expert knowledge 																			
39	What should the audit engagement partner's level of knowledge be of the following Professional Guidance Notes issued by the Actuarial Society of South Africa: PGN 103 (Actuary's report) PGN 104 (Financial Soundness Valuation) PGN 105 (AIDS extra mortality bases) PGN 110 (Investment Return Guarantees) Please highlight the relevant answers.	<table border="1"> <tr> <td>Not req'd</td> <td>Basic</td> <td>Sufficient</td> <td>Excellent</td> </tr> </table>	Not req'd	Basic	Sufficient	Excellent	Not req'd	Basic	Sufficient	Excellent	Not req'd	Basic	Sufficient	Excellent	Not req'd	Basic	Sufficient	Excellent	SAAS310;SAAS 315; AuG15.18-.19; SA Guide App B:.06-.07	
Not req'd	Basic	Sufficient	Excellent																	
Not req'd	Basic	Sufficient	Excellent																	
Not req'd	Basic	Sufficient	Excellent																	
Not req'd	Basic	Sufficient	Excellent																	
40	What should the actuarial expert's level of knowledge be of the following Professional Guidance Notes issued by the Actuarial Society of South Africa: PGN 103 (Actuary's report) PGN 104 (Financial Soundness Valuation) PGN 105 (AIDS extra mortality bases) PGN 110 (Investment Return Guarantees) Please highlight the relevant answers.	<table border="1"> <tr> <td>Not req'd</td> <td>Basic</td> <td>Sufficient</td> <td>Excellent</td> </tr> </table>	Not req'd	Basic	Sufficient	Excellent	Not req'd	Basic	Sufficient	Excellent	Not req'd	Basic	Sufficient	Excellent	Not req'd	Basic	Sufficient	Excellent	SAAS310;SAAS 315; AuG15.18-.19; SA Guide App B:.06-.07	
Not req'd	Basic	Sufficient	Excellent																	
Not req'd	Basic	Sufficient	Excellent																	
Not req'd	Basic	Sufficient	Excellent																	
Not req'd	Basic	Sufficient	Excellent																	

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)																	
41	Which audit team member(s) should have a “sufficient” or “excellent” knowledge of the relevant Professional Guidance Notes issued by the Actuarial Society of South Africa? Please highlight the relevant answer(s) and add any additional members.	<table border="1"> <tr><td>Audit Partner</td></tr> <tr><td> </td></tr> <tr><td>Audit Manager</td></tr> <tr><td> </td></tr> <tr><td>IT Audit Partner</td></tr> <tr><td> </td></tr> <tr><td>IT Audit Manager</td></tr> <tr><td> </td></tr> <tr><td>Actuarial expert</td></tr> <tr><td> </td></tr> <tr><td>Supervisor</td></tr> <tr><td> </td></tr> <tr><td>Staff below supervisor level</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Audit Partner		Audit Manager		IT Audit Partner		IT Audit Manager		Actuarial expert		Supervisor		Staff below supervisor level		Other – specify		SAAS310;SAAS 315; AuG15.18-.19; SA Guide App B:.06-.07	
Audit Partner																				
Audit Manager																				
IT Audit Partner																				
IT Audit Manager																				
Actuarial expert																				
Supervisor																				
Staff below supervisor level																				
Other – specify																				
42	How should the auditor gain knowledge of the relevant regulatory requirements (e.g. the Long-Term Insurance Act)? Please highlight the relevant answer(s) and add any additional methods.	<table border="1"> <tr><td>Reading</td></tr> <tr><td> </td></tr> <tr><td>Discussion with client – specify general job title(s)</td></tr> <tr><td> </td></tr> <tr><td>Training courses</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Reading		Discussion with client – specify general job title(s)		Training courses		Other – specify		SAAS310;SAAS 315; SA Guide.50									
Reading																				
Discussion with client – specify general job title(s)																				
Training courses																				
Other – specify																				
43	Which audit team member(s) should have a “sufficient” or “excellent” knowledge of the relevant regulatory requirements ? Please highlight the relevant answer(s) and add any additional members.	<table border="1"> <tr><td>Audit Partner</td></tr> <tr><td> </td></tr> <tr><td>Audit Manager</td></tr> <tr><td> </td></tr> <tr><td>IT Audit Partner</td></tr> <tr><td> </td></tr> <tr><td>IT Audit Manager</td></tr> <tr><td> </td></tr> <tr><td>Actuarial expert</td></tr> <tr><td> </td></tr> <tr><td>Supervisor</td></tr> <tr><td> </td></tr> <tr><td>Staff below supervisor level</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Audit Partner		Audit Manager		IT Audit Partner		IT Audit Manager		Actuarial expert		Supervisor		Staff below supervisor level		Other – specify		SAAS310;SAAS 315; SA Guide.50	
Audit Partner																				
Audit Manager																				
IT Audit Partner																				
IT Audit Manager																				
Actuarial expert																				
Supervisor																				
Staff below supervisor level																				
Other – specify																				

QUESTIONNAIRE: AUDIT APPROACHES

PART B1 – KNOWLEDGE OF THE BUSINESS

Nr	Question	Answer	Source(s)																							
44	Which types of assumptions do you believe to be critical to the valuation? Please highlight the relevant answer(s) and add any additional assumptions.	<table border="1"> <tr><td>Mortality</td></tr> <tr><td> </td></tr> <tr><td>Morbidity</td></tr> <tr><td> </td></tr> <tr><td>Investment returns</td></tr> <tr><td> </td></tr> <tr><td>Underlying investment mix</td></tr> <tr><td> </td></tr> <tr><td>Interest rates</td></tr> <tr><td> </td></tr> <tr><td>Expenses</td></tr> <tr><td> </td></tr> <tr><td>Taxation</td></tr> <tr><td> </td></tr> <tr><td>CPI or equivalent for premium indexation</td></tr> <tr><td> </td></tr> <tr><td>Lapse and surrender rates</td></tr> <tr><td> </td></tr> <tr><td>Future bonus rates</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Mortality		Morbidity		Investment returns		Underlying investment mix		Interest rates		Expenses		Taxation		CPI or equivalent for premium indexation		Lapse and surrender rates		Future bonus rates		Other – specify		USLHI:8.47-8.57; Sanlam 2003 AFS; SAAS545.44	Ref Q9
Mortality																										
Morbidity																										
Investment returns																										
Underlying investment mix																										
Interest rates																										
Expenses																										
Taxation																										
CPI or equivalent for premium indexation																										
Lapse and surrender rates																										
Future bonus rates																										
Other – specify																										
45	What non-accounting statistical data do you believe to be important to the valuation? Please highlight the relevant answer(s) and add any additional data.	<table border="1"> <tr><td>Personal statistics (e.g. birth date, gender, age, smoking status, population group etc.)</td></tr> <tr><td> </td></tr> <tr><td>Contract related data (e.g. in-force status, sum assured, rider benefits, 2nd lives assured etc.)</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Personal statistics (e.g. birth date, gender, age, smoking status, population group etc.)		Contract related data (e.g. in-force status, sum assured, rider benefits, 2 nd lives assured etc.)		Other – specify		PN20:SAS420.8; SA Guide AppB.17																	
Personal statistics (e.g. birth date, gender, age, smoking status, population group etc.)																										
Contract related data (e.g. in-force status, sum assured, rider benefits, 2 nd lives assured etc.)																										
Other – specify																										

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)													
	SYSTEMS AND CONTROLS: UNDERWRITING															
46	<p>Do you believe the auditor of a listed South Africa long-term insurer should review the following new business underwriting processes:</p> <ul style="list-style-type: none"> • Setting the underwriting policy for the product; • Setting the underwriting medical limits for the product; • Setting the reinsurance requirements for the product; • Underwriting each case; • Requesting of medical information; • Setting of exclusions; and • Other – specify? <p>Please highlight the relevant answer(s) and add any additional processes.</p>	<table border="0"> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> </table>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	SAAS310;SAAS315; PN20:SAS200.1; PN20:SAS420.4US LHI:8.91(k); AuG15.26; SA Guide.50	
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
47	<p>Do you believe the auditor of a listed South Africa long-term insurer should review the following benefits underwriting processes:</p> <ul style="list-style-type: none"> • Review of underwriting requirements, exclusions, missing information etc. upon receipt of a claim; and • Other – specify? <p>Please highlight the relevant answer(s) and add any additional processes.</p>	<table border="0"> <tr> <td align="center"><input type="checkbox"/> Yes</td> <td align="center"><input type="checkbox"/> No</td> </tr> </table>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	SAAS310;SAAS315; PN20:SAS200.1; PN20:SAS420.4US LHI:8.91(k); AuG15.26; SA Guide.50											
<input type="checkbox"/> Yes	<input type="checkbox"/> No															
	SYSTEMS AND CONTROLS: IT															
48	<p>Which of the functions affecting or affected by policy liabilities under insurance contracts and the related earnings of your client are highly computerised? Please highlight the relevant answer(s) and add any additional functions.</p>	<table border="1"> <tr> <td>Accounting, management and regulatory reporting information</td> </tr> <tr> <td> </td> </tr> <tr> <td>Actuarial valuation data</td> </tr> <tr> <td> </td> </tr> <tr> <td>Actuarial valuation calculations</td> </tr> <tr> <td> </td> </tr> <tr> <td>Recording and processing of insurance transactions (policy administration systems)</td> </tr> <tr> <td> </td> </tr> <tr> <td>Other – specify</td> </tr> <tr> <td> </td> </tr> </table>	Accounting, management and regulatory reporting information		Actuarial valuation data		Actuarial valuation calculations		Recording and processing of insurance transactions (policy administration systems)		Other – specify		SAAS315; PN20:SAS300.16-.17			
Accounting, management and regulatory reporting information																
Actuarial valuation data																
Actuarial valuation calculations																
Recording and processing of insurance transactions (policy administration systems)																
Other – specify																

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)												
49	What is the highest level of computer auditing expertise that should exist within the audit team of a listed South African long-term insurer? Please highlight the relevant answers.	<table border="1"> <tr><td>Partner</td></tr> <tr><td> </td></tr> <tr><td>Manager</td></tr> <tr><td> </td></tr> <tr><td>Below manager</td></tr> <tr><td> </td></tr> <tr><td>None</td></tr> <tr><td> </td></tr> </table>	Partner		Manager		Below manager		None		PN20:SAAS300.18 ; USLHI:p xi				
Partner															
Manager															
Below manager															
None															
50	What level of audit assurance should be gained from audit procedures regarding the reliability of the general controls within the IT environment affecting policy liabilities under insurance contracts and the related earnings? Please highlight the relevant answers.	<table border="1"> <tr><td>None - purely substantive audit approach should be followed</td></tr> <tr><td> </td></tr> <tr><td>Low</td></tr> <tr><td> </td></tr> <tr><td>High</td></tr> <tr><td> </td></tr> </table>	None - purely substantive audit approach should be followed		Low		High		PN20:SAAS300.18						
None - purely substantive audit approach should be followed															
Low															
High															
51	<p>For which applications should a high level of audit assurance be obtained regarding the reliability of IT application controls? Please highlight the relevant answer(s) and add any additional applications.</p> <p><i>(The terms “in-force database” and “valuation masterfiles” are described in the information on the first page of this questionnaire)</i></p>	<table border="1"> <tr><td><i>Recording of accounting transactions in the in-force database</i></td></tr> <tr><td> </td></tr> <tr><td><i>Recording of in-force database maintenance transactions</i></td></tr> <tr><td> </td></tr> <tr><td>Investment masterfiles</td></tr> <tr><td> </td></tr> <tr><td>Claims masterfiles</td></tr> <tr><td> </td></tr> <tr><td>Valuation masterfiles</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	<i>Recording of accounting transactions in the in-force database</i>		<i>Recording of in-force database maintenance transactions</i>		Investment masterfiles		Claims masterfiles		Valuation masterfiles		Other – specify		PN20:SAAS300.18 ;AuG15.33; SA Guide AppB.18; USLHI:6.07-6.08
<i>Recording of accounting transactions in the in-force database</i>															
<i>Recording of in-force database maintenance transactions</i>															
Investment masterfiles															
Claims masterfiles															
Valuation masterfiles															
Other – specify															
52	Should the auditor review the capability of IT applications to properly handle the specifications of new products?	<table border="1"> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> </tr> </table>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	USLHI:8.93(a)										
<input type="checkbox"/> Yes	<input type="checkbox"/> No														

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)															
	SYSTEMS AND CONTROLS: REINSURANCE		PGN106:5.8-5.10															
53	Assuming that reinsurance is material , which control related aspects relating to <i>ceded</i> reinsurance (i.e. risks ceded to other insurers as reinsurers) should the auditor test? Please highlight the relevant answer(s) and add any additional aspects.	<table border="1"> <tr><td>Completeness and accuracy of listings of reinsurance contracts</td></tr> <tr><td> </td></tr> <tr><td>Legality of new contracts and contract cancellations</td></tr> <tr><td> </td></tr> <tr><td>Initial assessments and ongoing monitoring of financial stability of reinsurers</td></tr> <tr><td> </td></tr> <tr><td>Accurate and complete reflection of contract terms and conditions in actuarial valuation</td></tr> <tr><td> </td></tr> <tr><td>Reconciliation of reinsurance contracts to policy and contract records</td></tr> <tr><td> </td></tr> <tr><td>Procedures for resolution of claims disputes</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Completeness and accuracy of listings of reinsurance contracts		Legality of new contracts and contract cancellations		Initial assessments and ongoing monitoring of financial stability of reinsurers		Accurate and complete reflection of contract terms and conditions in actuarial valuation		Reconciliation of reinsurance contracts to policy and contract records		Procedures for resolution of claims disputes		Other – specify		AuG15.61 -.62	Ref Q 196 – 199
Completeness and accuracy of listings of reinsurance contracts																		
Legality of new contracts and contract cancellations																		
Initial assessments and ongoing monitoring of financial stability of reinsurers																		
Accurate and complete reflection of contract terms and conditions in actuarial valuation																		
Reconciliation of reinsurance contracts to policy and contract records																		
Procedures for resolution of claims disputes																		
Other – specify																		
54	Assuming that reinsurance is material , which control related aspects relating to <i>assumed</i> reinsurance (i.e. risks accepted from other insurers) should the auditor test? Please highlight the relevant answer(s) and add any additional aspects.	<table border="1"> <tr><td>Review by statutory actuary of cedant’s underwriting standards etc. relevant to deriving assumptions</td></tr> <tr><td> </td></tr> <tr><td>Timeliness and completeness of data received: please specify manner in which it is tested – (1) review by internal audit; and/or (2) reports from external auditors on internal controls of cedant; and/or (3) conducting audit procedures at reinsurers on material agreements and transactions</td></tr> <tr><td> </td></tr> <tr><td><i>For treaty reinsurance only:</i> analysis of cumulative activity by reinsurance contract compared to expectations</td></tr> <tr><td> </td></tr> <tr><td>Procedures for resolution of claims disputes</td></tr> <tr><td> </td></tr> <tr><td>Other-specify</td></tr> <tr><td> </td></tr> </table>	Review by statutory actuary of cedant’s underwriting standards etc. relevant to deriving assumptions		Timeliness and completeness of data received: please specify manner in which it is tested – (1) review by internal audit; and/or (2) reports from external auditors on internal controls of cedant; and/or (3) conducting audit procedures at reinsurers on material agreements and transactions		<i>For treaty reinsurance only:</i> analysis of cumulative activity by reinsurance contract compared to expectations		Procedures for resolution of claims disputes		Other-specify		AuG15.61 -.62; USLHI:5.49(o)	Ref Q 196 - 199				
Review by statutory actuary of cedant’s underwriting standards etc. relevant to deriving assumptions																		
Timeliness and completeness of data received: please specify manner in which it is tested – (1) review by internal audit; and/or (2) reports from external auditors on internal controls of cedant; and/or (3) conducting audit procedures at reinsurers on material agreements and transactions																		
<i>For treaty reinsurance only:</i> analysis of cumulative activity by reinsurance contract compared to expectations																		
Procedures for resolution of claims disputes																		
Other-specify																		

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)											
	SYSTEMS AND CONTROLS: ASSUMPTIONS – Collection of underlying data													
55	<p>Do you believe that a listed South African long-term insurer should have formal accounting and/or financial reporting systems and controls in place for the collection of existing data (e.g. experience analyses) to be used in the setting of the following types of assumptions for the actuarial valuation:</p> <ul style="list-style-type: none"> - financial parameters (e.g. interest rates, investment returns and inflation); - expenses and unit expenses; - demographic parameters (e.g. lapses, surrenders, mortality and morbidity); - regulatory matters (e.g. tax); - business strategy (e.g. volumes of new business) <p><i>(The alternative would be that no formal systems exist and consequently, from an auditing point of view, the data collected is audited by means of a substantive audit strategy.)</i></p>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;"><input type="checkbox"/> Yes</td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> No</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> </tr> </table>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	SA Guide AppB.16; USLH18.94									
<input type="checkbox"/> Yes	<input type="checkbox"/> No													
<input type="checkbox"/> Yes	<input type="checkbox"/> No													
<input type="checkbox"/> Yes	<input type="checkbox"/> No													
<input type="checkbox"/> Yes	<input type="checkbox"/> No													
<input type="checkbox"/> Yes	<input type="checkbox"/> No													
56	<p>If the answer to any of the assumptions in question 55 was “Yes”, briefly describe:</p> <ul style="list-style-type: none"> • the objective(s) or purpose(s) of such system(s); and • the working of such system(s). 													
57	<p>For each system described in question 56, please indicate whether the audit strategy should include the evaluation of the design and implementation of the controls in such system. For each system as described, please answer either “Yes” or “No”. <i>(The implication of a “No” answer is that a purely substantive audit strategy is followed for the data used in the setting of assumptions.)</i></p>													

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)									
58	For each system described in question 56, please indicate whether the audit strategy should include the testing of the controls in such systems if their design and implementation have been evaluated as effective. For each system as described, please answer either “Yes” or “No”. <i>(The implication of a “No” answer is that a purely substantive audit strategy is followed for the data used in the setting of assumptions.)</i>		AuG15.43; SA Guide AppB.14; AuG15.45; SA Guide AppB.16; USLHI:8.94; SAAS545.45; PN20:SAS420.6; PN20:SAS520.6(c); PN20:SAS520.6; USLHI:p171*8; USLHI:p172*9; AuG15.45; ; SA Guide AppB.16; USLHI:p171*8									
	SYSTEMS AND CONTROLS: ASSUMPTIONS – Derivation of assumptions from underlying data											
59	Do you believe that a listed South African long-term insurer should have formal accounting and/or financial reporting systems and controls in place for the derivation of the following types of assumptions from the underlying data for the actuarial valuation: <ul style="list-style-type: none"> - financial parameters (e.g. interest rates, investment returns and inflation); - expenses and unit expenses; - demographic parameters (e.g. lapses, surrenders, mortality and morbidity); - regulatory matters (e.g. tax); - business strategy (e.g. volumes of new business) <i>(The alternative would be that no formal systems exist and consequently, from an auditing point of view, the derivation of assumptions are audited by means of a substantive audit strategy.)</i>	<table border="0"> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> </tr> </table>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	SA Guide AppB.16; USLHI8.94	
<input type="checkbox"/> Yes	<input type="checkbox"/> No											
<input type="checkbox"/> Yes	<input type="checkbox"/> No											
<input type="checkbox"/> Yes	<input type="checkbox"/> No											
<input type="checkbox"/> Yes	<input type="checkbox"/> No											
60	If the answer to any of the assumptions in question 59 was “Yes”, briefly describe: <ul style="list-style-type: none"> • the objective(s) or purpose(s) of such system(s); and • the working of such system(s). 											

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)	
61	For each system described in question 60, please indicate whether the audit strategy should include the evaluation of the design and implementation of the controls in such system. For each system as described, please answer either “Yes” or “No”. <i>(The implication of a “No” answer is that a purely substantive audit strategy is followed for the derivation of assumptions from the underlying data.)</i>			
62	For each system described in question 60, please indicate whether the audit strategy should include the testing of the controls in such systems if their design and implementation have been evaluated as effective. For each system as described, please answer either “Yes” or “No”. <i>(The implication of a “No” answer is that a purely substantive audit strategy is followed for the derivation of assumptions from the underlying data.)</i>		AuG15.43; SA Guide AppB.14; AuG15.45; SA Guide AppB.16; USLHI:8.94; SAAS545.45; PN20:SAS420.6; PN20:SAS520.6(c); PN20:SAS520.6; USLHI:p171*8; USLHI:p172*9; AuG15.45; ; SA Guide AppB.16; USLHI:p171*8	

QUESTIONNAIRE: AUDIT APPROACHES

PART B2 – ACCOUNTING PROCESSES AND INTERNAL CONTROLS

Nr	Question	Answer	Source(s)															
	SYSTEMS AND CONTROLS: SOURCE DATA		SA Guide AppB.18; USLH18.94; AuG15.33															
63	<p>When the auditor tests controls over transaction cycles, in which transaction cycles should (s)he test the validity, accuracy and completeness of recording of the relevant transactions in the in-force database? Please highlight the relevant answer(s) and add any additional cycles.</p> <p><i>(“In force database” is defined in the information on the first page of this questionnaire)</i></p>	<table border="1"> <tr><td>Underwriting/New Business</td></tr> <tr><td>Renewals / Premium collection</td></tr> <tr><td>Reinsurance</td></tr> <tr><td>Commission</td></tr> <tr><td>Policy records</td></tr> <tr><td>Masterfile maintenance</td></tr> <tr><td>Claims and maturities</td></tr> <tr><td>Policy loans and surrenders</td></tr> <tr><td>Lapses and reinstatements of policies</td></tr> <tr><td>Investments</td></tr> <tr><td>Administration expenses</td></tr> <tr><td>Cash receipts</td></tr> <tr><td>Cash payments</td></tr> <tr><td>Other – specify</td></tr> </table>	Underwriting/New Business	Renewals / Premium collection	Reinsurance	Commission	Policy records	Masterfile maintenance	Claims and maturities	Policy loans and surrenders	Lapses and reinstatements of policies	Investments	Administration expenses	Cash receipts	Cash payments	Other – specify	AuG15.34	
Underwriting/New Business																		
Renewals / Premium collection																		
Reinsurance																		
Commission																		
Policy records																		
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Policy loans and surrenders																		
Lapses and reinstatements of policies																		
Investments																		
Administration expenses																		
Cash receipts																		
Cash payments																		
Other – specify																		
64	<p>How should the auditor test the correctness of the allocation of expenses between acquisition and maintenance expenses? Please highlight the relevant answer(s).</p>	<table border="1"> <tr><td>Tests of controls</td></tr> <tr><td>Substantive analytical procedures</td></tr> <tr><td>Substantive tests of detail</td></tr> </table>	Tests of controls	Substantive analytical procedures	Substantive tests of detail	LL Risk Doc												
Tests of controls																		
Substantive analytical procedures																		
Substantive tests of detail																		

QUESTIONNAIRE: AUDIT APPROACHES

PART B4 – MATERIALITY

Nr	Question	Answer	Source(s)															
			General: SAAS300.09; SAAS320															
65	Which stakeholders do you believe to be important users of the financial statements of a listed South African long-term insurer? Please highlight the relevant answer(s) and add any additional stakeholders.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Shareholders</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Investment analysts</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Policyholders</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">SARS</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Financial Services Board</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Management</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Shareholders		Investment analysts		Policyholders		SARS		Financial Services Board		Management		Other – specify			
Shareholders																		
Investment analysts																		
Policyholders																		
SARS																		
Financial Services Board																		
Management																		
Other – specify																		
66	Should the auditor set a single planning materiality figure for the financial statements as a whole or separate planning materiality figures for income statement and balance sheet items (“multiple”)? <i>(Note: this question relates to planning materiality for the financial statements as a whole, and <u>not</u> to planning materiality for individual financial statement line items.)</i>	<input type="checkbox"/> Single <input type="checkbox"/> Multiple	PN20:SAS220.6															
67	Which financial statement(s) should the auditor use as a basis for setting planning materiality? Please highlight the relevant answer(s) and add any additional bases. If a combination of the financial statements or more than one financial statement should be used, please elaborate.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Income statement</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Balance sheet</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Combination – elaborate</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Income statement		Balance sheet		Combination – elaborate		Other – specify									
Income statement																		
Balance sheet																		
Combination – elaborate																		
Other – specify																		
68	What basis/es should the auditor use for setting planning materiality? Please highlight the relevant answer(s) and add any additional bases. If revenue should be used, please define what it comprises.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Revenue – define</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Net profit before tax</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Equity</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Total assets</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Revenue – define		Net profit before tax		Equity		Total assets		Other – specify		DP6					
Revenue – define																		
Net profit before tax																		
Equity																		
Total assets																		
Other – specify																		

QUESTIONNAIRE: AUDIT APPROACHES

PART B4 – MATERIALITY

Nr	Question	Answer	Source(s)					
69	Assuming that reinsurance is material , should the auditor add back the effect of reinsurance on the basis used in calculating planning materiality?	<input type="checkbox"/> Yes <input type="checkbox"/> No	PN20:SAS220.4					
70	Which qualitative factors should the auditor consider in setting planning materiality? Please highlight the relevant answer(s) and add any additional factors.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Disclosable items</td> </tr> <tr> <td> </td> </tr> <tr> <td>Other – specify</td> </tr> <tr> <td> </td> </tr> </table>	Disclosable items		Other – specify		PN20:SAS220.7	
Disclosable items								
Other – specify								
71	Briefly describe the impact of each qualitative factor in question 70 on planning materiality.		PN20:SAS220.7					
72	Do you discuss the basis used in setting planning materiality with the statutory actuary in his/her capacity as employee of the client (i.e. not in the capacity of an expert/specialist for the audit)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	AuG15.20					
73	Do you disclose the amount of planning materiality to the statutory actuary in his/her capacity as employee of the client ?	<input type="checkbox"/> Yes <input type="checkbox"/> No	AuG15.20					
74	Do you disclose the amount of tolerable error to the statutory actuary in his/her capacity as employee of the client ?	<input type="checkbox"/> Yes <input type="checkbox"/> No	AuG15.20					

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	VALUATION: GENERAL			
75	On which aspects of the actuarial valuation process should the auditor perform audit procedures? Please highlight the relevant answer(s) and add any additional aspects.	<input type="checkbox"/> Appropriateness of assumptions <input type="checkbox"/> Controls and procedures to ensure completeness and accuracy/integrity of source data <input type="checkbox"/> Calculation and aggregation of actuarial liabilities <input type="checkbox"/> Validation of valuation results <input type="checkbox"/> Accuracy and completeness of reporting <input type="checkbox"/> Other – specify	PN20:SAS420.17; AuG15.8	
76	How should the auditor assess the appropriateness of the primary valuation method (e.g. prospective, retrospective) used for each product type?			
77	How should the auditor assess the impact of changes in valuation methods on the financial statements?			Ref Q 207
	ASSUMPTIONS		PGN106:5.4, 5.6	
78	What extent of <i>substantive audit work</i> should the auditor perform on the appropriateness of the valuation assumptions ? Please highlight the relevant answer.	<input type="checkbox"/> Minimal <input type="checkbox"/> Moderate <input type="checkbox"/> High	AuG15.43; SA Guide AppB.14-; PN20:SAS520.6(c)	
79	Please provide a high level description of the nature of the <i>substantive tests</i> that the auditor should perform on the underlying data used by the statutory in setting the valuation assumptions.		AuG15.45; SAAS545.50	
80	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy and integrity of experience investigations (e.g. for mortality, morbidity etc.) conducted by the client.		SAAS310;SAAS315; USLHI:5.12(l); USLHI:8.91(d); AuG15.40, LL Risk Doc	Ref Q 100-101
81	Should the auditor compare actual experience for all relevant assumptions to previous assumptions and obtain explanations for significant variances?	<input type="checkbox"/> Yes <input type="checkbox"/> No	USSLHI: 8.91(d); AuG15.27; SA Guide.50	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)						
82	<p>Which information in the analysis of surplus do you believe to be significant for audit purposes?</p> <p><i>(The term “analysis of surplus” refers to the analysis performed by the actuary to explain the total movement in the net surplus from one financial year to the next.)</i></p>		PN20:SAS420.18						
83	<p>Please provide a high level description of the audit procedures (tests of controls and/or substantive tests) that the auditor should perform to test that the assumptions have been properly derived from the underlying data.</p>								
84	<p>Please provide a high level description of the audit procedures that the auditor should perform on the statutory actuary’s sensitivity analysis on assumptions.</p>		AuG15.45; SA Guide AppB.16; SAAS545.45; Pn20:SAS520.12						
85	<p>Briefly describe how the auditor should test the yield on investment portfolios underlying annuity products.</p>		USLHI.8.112; USLHI:p172*10						
86	<p>Briefly describe how the auditor should test the yield on investment portfolios underlying products providing investment return guarantees.</p>		USLHI.8.112; USLHI:p172*10						
87	<p>How should the auditor satisfy him/herself that the margins included in the discount yield used to value annuity products, is sufficient to cover the best estimate of the cost of defaults? Please highlight the relevant answer(s) and add any additional methods.</p>	<table border="1"> <tr> <td>Enquiries from management</td> </tr> <tr> <td> </td> </tr> <tr> <td>Other –specify</td> </tr> <tr> <td> </td> </tr> </table>	Enquiries from management		Other –specify		LL Risk Doc		
Enquiries from management									
Other –specify									
88	<p>How should the auditor identify the existence of second tier margins? Please highlight the relevant answer(s) and add any additional methods.</p>	<table border="1"> <tr> <td>Review of actuarial documentation</td> </tr> <tr> <td> </td> </tr> <tr> <td>Enquiries from management</td> </tr> <tr> <td> </td> </tr> <tr> <td>Other – specify</td> </tr> </table>	Review of actuarial documentation		Enquiries from management		Other – specify	LL Risk Doc	Ref Q 141
Review of actuarial documentation									
Enquiries from management									
Other – specify									

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)							
89	How should the auditor satisfy him/herself that second tier margins are consistent with policy design and company policy? Please highlight the relevant answer(s) and add any additional methods.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Review of actuarial documentation</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Enquiries from management</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Review of actuarial documentation		Enquiries from management		Other – specify		LL Risk Doc	Ref Q 141
Review of actuarial documentation										
Enquiries from management										
Other – specify										
90	How should the auditor satisfy him/herself that second tier margins are released prudently and consistently from year to year? Please highlight the relevant answer(s) and add any additional methods.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Review of actuarial documentation</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Enquiries from management</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Review of actuarial documentation		Enquiries from management		Other – specify		LL Risk Doc	Ref Q 141
Review of actuarial documentation										
Enquiries from management										
Other – specify										
	PROFIT ENTITLEMENTS AND EARNINGS									
91	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test that the profit entitlement policies for risk profits/losses (risk premiums less related benefits) are accurately and consistently applied?		SAAS315; PN20:SAS300.5; PN20:SAS420.18; PN20:SAS520.6(c)							
92	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test that the profit entitlement policies for profits/losses calculated on a fees less expenses basis are accurately and consistently applied?		SAAS315; PN20:SAS300.5; PN20:SAS420.18; PN20:SAS520.6(c)							
93	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test that the profit entitlement policies for asset mismatch profits/losses are accurately and consistently applied?		SAAS315; PN20:SAS300.5; PN20:SAS420.18; PN20:SAS520.6(c)							
94	Should the auditor review the actuarial analysis of the sources of the current year's earnings performed by the statutory actuary?	<input type="checkbox"/> Yes <input type="checkbox"/> No	USLHI:p175; AuG15.39; PN20:SAS420.18							

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)													
95	If the answer to question 94 was “Yes”, which audit team member (staff level) should be ultimately responsible for performing the review of the actuarial analysis of the sources of the current year’s earnings? Please highlight the relevant answer(s) and add any additional members.	<table border="1"> <tr><td>Partner</td></tr> <tr><td> </td></tr> <tr><td>Manager</td></tr> <tr><td> </td></tr> <tr><td>Senior</td></tr> <tr><td> </td></tr> <tr><td>Junior</td></tr> <tr><td> </td></tr> <tr><td>Actuarial expert</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Partner		Manager		Senior		Junior		Actuarial expert		Other – specify		USLHI:p175; AuG15.39	
Partner																
Manager																
Senior																
Junior																
Actuarial expert																
Other – specify																
96	If the answer to question 94 was “Yes”, please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy of the analysis of the sources of the current year’s earnings?		PN20:SAS420.18; PN20:SAS520.6(c)													
	SOURCE DATA		PGN106:5.1													
	For questions 97 – 128, please refer to the descriptions of the terms “in-force database” and “valuation masterfiles” in the information on the first page of this questionnaire. Please read each of these questions carefully to identify which of these two data sets it relates to.															
97	Which type(s) of audit procedures should the auditor perform on the client’s record counts on the valuation masterfiles ? Please highlight the relevant answer(s) and add any additional procedures. Please provide descriptions of the nature of analytical procedures and/or substantive tests of detail (if any).	<table border="1"> <tr><td>None</td></tr> <tr><td> </td></tr> <tr><td>Tests of control</td></tr> <tr><td> </td></tr> <tr><td>Analytical procedures –specify</td></tr> <tr><td> </td></tr> <tr><td>Substantive tests of detail – specify</td></tr> <tr><td> </td></tr> </table>	None		Tests of control		Analytical procedures –specify		Substantive tests of detail – specify		AuG15.33; USLHI:p169*1					
None																
Tests of control																
Analytical procedures –specify																
Substantive tests of detail – specify																

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
98	<p>Which type(s) of audit procedures should the auditor perform on the client's input/output reconciliations on the valuation masterfiles? Please highlight the relevant answer(s) and add any additional procedures. Please provide descriptions of the nature of analytical procedures and/or substantive tests of detail (if any).</p> <p><i>(These reconciliations refer to the transfer, processing and aggregation of data from the in-force database to the valuation masterfiles)</i></p>	<p>None</p> <hr/> <p>Tests of control</p> <hr/> <p>Analytical procedures –specify</p> <hr/> <p>Substantive tests of detail – specify</p> <hr/>	AuG15.33	
99	<p>Which audit procedures should the auditor perform to test the accuracy of non-accounting statistical data (e.g. decrements) used in the valuation process? Please highlight the relevant answer(s) and add any additional procedures.</p>	<p>None</p> <hr/> <p>Tests of control</p> <hr/> <p>Analytical procedures – analysed in comparison with audited financial data</p> <hr/> <p>Detailed substantive procedures - reconciliation with audited financial data</p> <hr/> <p>Other – specify</p> <hr/>	PN20:SAS420.8; USLHI6.11; PN20:SAS520.6	
100	<p>Should the auditor review a reconciliation between the in-force database and the decrements listing?</p> <p><i>(The decrements listing is the listing of “out of force” policy movements during the financial year.)</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	LL Risk Doc	Ref Q80
101	<p>Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy of the decrements listing?</p>		LL Risk Doc	Ref Q80

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)												
102	Which types of audit procedures should the auditor perform to ensure the validity (existence/occurrence assertion) of the in-force database ? Please highlight the relevant answer(s).	<table border="1"> <tr><td>Tests of controls in other cycles</td></tr> <tr><td>Substantive tests of data from independent sources (e.g. claim payments, lapses, surrenders)</td></tr> </table>	Tests of controls in other cycles	Substantive tests of data from independent sources (e.g. claim payments, lapses, surrenders)	USLHI:6.12,6.13(f); PN20:SAS520.6										
Tests of controls in other cycles															
Substantive tests of data from independent sources (e.g. claim payments, lapses, surrenders)															
103	As part of the audit procedures, which types of transactions should the auditor select from the in-force database and trace to their source for validity (occurrence assertion)? Please highlight the relevant answer(s) and add any additional transactions.	<table border="1"> <tr><td>Not necessary</td></tr> <tr><td>New business</td></tr> <tr><td>Premium receipts</td></tr> <tr><td>Premium increases</td></tr> <tr><td>Claims</td></tr> <tr><td>Lapses</td></tr> <tr><td>Surrenders</td></tr> <tr><td>Automatic policy loans</td></tr> <tr><td>Automatic fully paid up's</td></tr> <tr><td>Premium waivers</td></tr> <tr><td>Other – specify</td></tr> </table>	Not necessary	New business	Premium receipts	Premium increases	Claims	Lapses	Surrenders	Automatic policy loans	Automatic fully paid up's	Premium waivers	Other – specify		
Not necessary															
New business															
Premium receipts															
Premium increases															
Claims															
Lapses															
Surrenders															
Automatic policy loans															
Automatic fully paid up's															
Premium waivers															
Other – specify															
104	Which audit procedures should the auditor perform to test that no duplicate in-force database records exist? Please highlight the relevant answer(s). Please provide descriptions of the nature of tests of control and/or substantive tests of detail.	<table border="1"> <tr><td>None</td></tr> <tr><td>Tests of control - specify</td></tr> <tr><td>Substantive tests of detail – specify</td></tr> </table>	None	Tests of control - specify	Substantive tests of detail – specify	USLHI:8.94(c); 6.11									
None															
Tests of control - specify															
Substantive tests of detail – specify															
105	Which audit procedures should the auditor perform to test that no fictitious in-force database records exist? Please highlight the relevant answer(s). Please provide descriptions of the nature of tests of control and/or substantive tests of detail.	<table border="1"> <tr><td>None</td></tr> <tr><td>Tests of control - specify</td></tr> <tr><td>Substantive tests of detail – specify</td></tr> </table>	None	Tests of control - specify	Substantive tests of detail – specify	USLHI:8.94(c); 6.11									
None															
Tests of control - specify															
Substantive tests of detail – specify															

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)																							
106	Should the audit procedures include agreement of policy details on the in-force database with policy contracts and related documentation?	<input type="checkbox"/> Yes <input type="checkbox"/> No	AuG15.50																							
107	Should the auditor ever obtain direct confirmation of the existence and accuracy of contract data in the in-force database from policyholders?	<input type="checkbox"/> Yes <input type="checkbox"/> No	USLHI:6.15; AuG15.50																							
108	If the answer to question 107 was “Yes”, briefly describe under which circumstances this should be done.		USLHI:6.17																							
109	As part of the audit procedures, which types of transactions should be selected <i>from their source</i> and <i>traced to the in-force database</i> for accuracy ? Please highlight the relevant answer(s) and add any additional transactions.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Not necessary</td></tr> <tr><td> </td></tr> <tr><td>New business</td></tr> <tr><td> </td></tr> <tr><td>Premium receipts</td></tr> <tr><td> </td></tr> <tr><td>Premium increases</td></tr> <tr><td> </td></tr> <tr><td>Claims</td></tr> <tr><td> </td></tr> <tr><td>Lapses</td></tr> <tr><td> </td></tr> <tr><td>Surrenders</td></tr> <tr><td> </td></tr> <tr><td>Automatic policy loans</td></tr> <tr><td> </td></tr> <tr><td>Automatic fully paid up's</td></tr> <tr><td> </td></tr> <tr><td>Premium waivers</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Not necessary		New business		Premium receipts		Premium increases		Claims		Lapses		Surrenders		Automatic policy loans		Automatic fully paid up's		Premium waivers		Other – specify			
Not necessary																										
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QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)																							
110	As part of the audit procedures, which types of transactions should be selected <i>from their source</i> and <i>traced to the in-force database</i> for completeness ? Please highlight the relevant answer(s) and add any additional transactions.	<table border="1"> <tr><td>Not necessary</td></tr> <tr><td> </td></tr> <tr><td>New business</td></tr> <tr><td> </td></tr> <tr><td>Premium receipts</td></tr> <tr><td> </td></tr> <tr><td>Premium increases</td></tr> <tr><td> </td></tr> <tr><td>Claims</td></tr> <tr><td> </td></tr> <tr><td>Lapses</td></tr> <tr><td> </td></tr> <tr><td>Surrenders</td></tr> <tr><td> </td></tr> <tr><td>Automatic policy loans</td></tr> <tr><td> </td></tr> <tr><td>Automatic fully paid up's</td></tr> <tr><td> </td></tr> <tr><td>Premium waivers</td></tr> <tr><td> </td></tr> <tr><td>Other – specify</td></tr> <tr><td> </td></tr> </table>	Not necessary		New business		Premium receipts		Premium increases		Claims		Lapses		Surrenders		Automatic policy loans		Automatic fully paid up's		Premium waivers		Other – specify			
Not necessary																										
New business																										
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Premium waivers																										
Other – specify																										
111	Which types of audit procedures should the auditor perform to ensure the <i>completeness</i> of the in-force database ? Please highlight the relevant answer(s).	<table border="1"> <tr><td>Tests of controls in other transaction cycles</td></tr> <tr><td> </td></tr> <tr><td>Substantive tests of data from independent sources e.g. cash receipts, commission</td></tr> <tr><td> </td></tr> </table>	Tests of controls in other transaction cycles		Substantive tests of data from independent sources e.g. cash receipts, commission		USLHI:6.12; PN20:SAS520.6																			
Tests of controls in other transaction cycles																										
Substantive tests of data from independent sources e.g. cash receipts, commission																										
112	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test that proper cut-off was applied between accounting information regarding premiums and the in-force database ?		AuG15.34; USLHI:6.13(e); PN20:SAS520.6; SA Guide AppB.19; USLHI:p132, p171*7 Remember Investment cut-off																							

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)							
113	Which audit procedures should the auditor perform to test that proper cut-off was applied between accounting information regarding policy benefits and the in-force database ? Please highlight the relevant answer(s) and add any additional procedures.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Review of claim activity before and after year end ensuring policies are made “out of force” when claim is recognised in accounting records</td> </tr> <tr> <td style="padding: 2px;">Review of claims processing backlogs</td> </tr> <tr> <td style="padding: 2px;">Review of claims suspense accounts and their reconciliations to General Ledger accounts</td> </tr> <tr> <td style="padding: 2px;">Review of Claims Incurred But Not Reported balances (if applicable)</td> </tr> <tr> <td style="padding: 2px;">Other - specify</td> </tr> </table>	Review of claim activity before and after year end ensuring policies are made “out of force” when claim is recognised in accounting records	Review of claims processing backlogs	Review of claims suspense accounts and their reconciliations to General Ledger accounts	Review of Claims Incurred But Not Reported balances (if applicable)	Other - specify	AuG15.34; USLHI:6.13(e); PN20:SAS520.6; SA Guide AppB.19; USLHI:p193*1, p170; SA Guide.90; p171*7 Remember Investment cut-off		
Review of claim activity before and after year end ensuring policies are made “out of force” when claim is recognised in accounting records										
Review of claims processing backlogs										
Review of claims suspense accounts and their reconciliations to General Ledger accounts										
Review of Claims Incurred But Not Reported balances (if applicable)										
Other - specify										
114	For fully paid up policies, briefly describe how the auditor should test that the sum assured on the in-force database is validly, accurately and completely reduced by each premium as it becomes due?		USLHI:p133(*1)							
115	What proportion of your client’s total policy liabilities comprise participating (with profits) business (measured as % of total policy liabilities)? Please highlight the relevant answer.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">0%</td> <td style="padding: 2px;">1%-5%</td> <td style="padding: 2px;">6%-10%</td> </tr> <tr> <td style="padding: 2px;">11%-25%</td> <td style="padding: 2px;">>25%</td> <td></td> </tr> </table>	0%	1%-5%	6%-10%	11%-25%	>25%		SA Guide.50	
0%	1%-5%	6%-10%								
11%-25%	>25%									
116	How should the auditor gain an understanding of the client’s bonus philosophy and changes in bonus rates? Please highlight the relevant answer(s) and add any additional procedures.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Discussion with statutory actuary</td> </tr> <tr> <td style="padding: 2px;">Reading of actuarial documentation</td> </tr> <tr> <td style="padding: 2px;">Review of minutes of board meetings</td> </tr> <tr> <td style="padding: 2px;">Other – specify</td> </tr> </table>	Discussion with statutory actuary	Reading of actuarial documentation	Review of minutes of board meetings	Other – specify	SA Guide.50			
Discussion with statutory actuary										
Reading of actuarial documentation										
Review of minutes of board meetings										
Other – specify										
117	How should the auditor assess the impact of economic and other factors on policyholders’ reasonable expectations of future bonus rates?		USLHI:8.91(e); PGN106:3.5,7.5(e)							

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)				
118	How should the auditor satisfy him/herself that policyholders' reasonable expectations have been properly reflected in the assumptions regarding future bonuses? Please highlight the relevant answer(s) and add any additional procedures.	<table border="1"> <tr><td>Enquiries from management</td></tr> <tr><td>Review complaints from policyholders</td></tr> <tr><td>Review correspondence from Ombudsman</td></tr> <tr><td>Other – specify</td></tr> </table>	Enquiries from management	Review complaints from policyholders	Review correspondence from Ombudsman	Other – specify	LL Risk Doc; PGN106:3.5;7.5(e)
Enquiries from management							
Review complaints from policyholders							
Review correspondence from Ombudsman							
Other – specify							
119	Which audit procedures should the auditor perform to test that approved reversionary bonus declarations are validly, accurately and completely captured in the in-force database? Please highlight the relevant answer(s) and specify the nature of substantive procedures.	<table border="1"> <tr><td>None</td></tr> <tr><td>Tests of controls</td></tr> <tr><td>Substantive procedures – specify</td></tr> </table>	None	Tests of controls	Substantive procedures – specify	SA Guide.106, USLHI:p169*2	
None							
Tests of controls							
Substantive procedures – specify							
120	Which type(s) of audit procedures should be performed to test that data transfer and/or extraction from the in-force database to the valuation masterfiles has taken place validly, accurately and completely? Please highlight the relevant answer.	<table border="1"> <tr><td>None</td></tr> <tr><td>Tests of controls</td></tr> <tr><td>Substantive tests of details</td></tr> </table>	None	Tests of controls	Substantive tests of details		
None							
Tests of controls							
Substantive tests of details							
121	Should the auditor review details of IT system failures, breaches of security and unauthorised access to in-force database, other interfaced application systems and valuation masterfiles? If your answer is “No”, please explain.	<table border="1"> <tr><td>Yes</td></tr> <tr><td>No - explain</td></tr> </table>	Yes	No - explain	USLHI6.13(d); AuG15.50		
Yes							
No - explain							
122	Briefly describe any reconciliations between the in-force database , other application systems and the general ledger that the auditor should review as part of the audit.		USLHI6.16(c); PN20:SAS520.6; USLHI:p170*5				
123	Which audit procedures should the auditor perform on adjustments made between accounting information and the in-force database ? Please highlight the relevant answer(s) and briefly describe the nature of substantive procedures.	<table border="1"> <tr><td>None</td></tr> <tr><td>Tests of controls</td></tr> <tr><td>Substantive procedures – specify</td></tr> </table>	None	Tests of controls	Substantive procedures – specify	AuG15.50	
None							
Tests of controls							
Substantive procedures – specify							

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
124	Which audit procedures should the auditor perform on the validity of any adjustments to the valuation records subsequent to original extraction from the in-force database? Please highlight the relevant answer(s) and briefly describe the nature of substantive procedures.	None Tests of controls Substantive procedures – specify	USLHI:p169*3; USLHI:p173*12	
125	How should the auditor test that no data is improperly omitted or added to existing, tested source data in the valuation masterfiles during the actuarial calculation process?		AuG15.50	
126	In your opinion, which suspense accounts have a significant impact on the valuation of insurance contracts? Please highlight the relevant answer(s) and add any additional accounts.	Unallocated premiums Unallocated claims Unallocated commission Other –specify	USLHI:5.36(d)(16); SA Guide.72	
127	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform on suspense accounts containing data that affects the valuation of insurance contracts and/or the related earnings?		USLHI:5.36(d)(16); SA Guide.72	
128	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform on the validity, accuracy and completeness of source data for products not administered on the main policy administration systems ?		LL Risk Doc	
	ACTUARIAL CALCULATIONS		PGN106:5.2	
129	Which recognised model(s) is/are used by your client for the prospective valuation process (e.g. Prophet, MoSes).			

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
130	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to ensure that the model(s) used for the prospective valuation yield a valid, accurate and complete valuation result.			
131	Should the auditor agree figures brought forward to those of the prior year?	<input type="checkbox"/> Yes <input type="checkbox"/> No	LL Risk Doc	
132	Should audit procedures include reperformance of actuarial calculations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SAAS540.19	
133	How should the auditor test the independent checks of the logic used in deriving calculations, performed within the actuarial department?		SA Guide AppB.23; AuG15.35, .53, .50	
134	How should the auditor test independent checks of the actuarial calculations , performed within the actuarial department?		SA Guide AppB.23; AuG15.35, .53	
135	How should the auditor test that actuarial calculations have been made for all product types , including new product types (completeness)?		SA Guide AppB.25-.26; AuG15.52, .53	
136	How should the auditor test that actuarial calculations have been made for all policies within each product type ?		SA Guide AppB.25; AuG15.52, .53	
137	Where in-force contracts are grouped into “cells” for valuation purposes, how should the auditor test the allocation of contracts to appropriate “cells”?		USLHI:p173*11	
138	How should the auditor test the appropriateness of the actuarial calculations for new product lines ?		AuG15.53, SAAS545.25	
139	How should the auditor test that actuarial calculations for new product lines are consistent with those for similar existing product lines?		SA Guide AppB.25; AuG15.52, .53; SAAS545.28	
140	How should the auditor test that changes in assumptions have been validly, accurately and completely reflected in the actuarial calculation?		SA Guide AppB.26; AuG15.52-.53; SAAS545.28; USLHI:p170*6	Ref Q 207

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
141	Should the auditor test that prescribed margins and appropriate second tier margins have been added to best estimate assumptions in the actuarial calculations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	LL Risk Doc	Ref Q 88- 90
142	How should the auditor test the allocation and recording of premiums between risk premiums and investment premiums? Please highlight the relevant answer(s) and add any additional methods. Please specify the nature of “other substantive testing” if selected.	Test of controls over underwriting process Substantive testing –agreement of investment premium to increase in account balance Other substantive testing – specify Other – specify	USLHI:p134*2, p135*3; USLHI:9.19	
143	How should the auditor test the allocation and recording of policy benefits between risk benefits and investment benefits? Please highlight the relevant answer(s), specify the nature of substantive testing if selected and add any additional methods.	Test of controls over claims process (ensure that company policy is followed) Substantive testing – specify Other – specify		
144	How should the auditor test the validity, accuracy and completeness of the creation of units for unit-linked business? Please highlight the relevant answer, specify the nature of substantive testing if selected and add any additional methods.	Test of controls Substantive testing – specify Other – specify	SA Guide.78; PGN106:4.9	
145	How should the auditor test the validity, accuracy and completeness of the cancellation of units for unit-linked business? Please highlight the relevant answer, specify the nature of substantive testing if selected and add any additional methods.	Test of controls Substantive testing – specify Other – specify	SA Guide.78; PGN106:4.9	
146	For universal life-type contracts, how do you test that cash flows (premiums and expenses) and interest have been properly applied to each contract? Please highlight the relevant answer, specify the nature of substantive testing if selected and add any additional methods.	Test of controls Substantive testing – specify Other – specify	USLHI:P174*13	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	In questions 147 - 150, the term “build-up of retrospective reserves” refers to the build-up of the assets related to the liability, from the premiums, investment returns, expenses and policy benefits related to particular portfolio.			
147	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy of the premiums received included the build-up of retrospective reserves .			
148	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy of the investment return included the build-up of retrospective reserves .			
149	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy of the expenses (e.g. management fees and taxation) included the build-up of retrospective reserves .			
150	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the accuracy of the policy benefits paid included the build-up of retrospective reserves .			

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	VALIDATION OF VALUATION RESULT			
151	<p>How should the auditor test the reasonability / validity of the actuarial calculations? Please highlight the relevant answer, specify the nature of analytical procedures if selected and add any additional methods.</p> <p><i>(The term “analysis of surplus” refers to the analysis performed by the actuary to explain the total movement in the net surplus from one financial year to the next.)</i></p>	<p>Review sensitivity analyses</p> <hr/> <p>Review analysis of surplus</p> <hr/> <p>Analytical procedures – specify</p> <hr/> <p>Other – specify</p> <hr/>	SAAS545.45	
152	<p>Which abnormalities should the auditor review the valuation results for? Please highlight the relevant answer and add any additional abnormalities.</p> <p><i>(The term “analysis of surplus” refers to the analysis performed by the actuary to explain the total movement in the net surplus from one financial year to the next.)</i></p>	<p>None – review of analysis of surplus should identify all material abnormalities</p> <hr/> <p>Contracts with zero reserves</p> <hr/> <p>Contracts with negative reserves</p> <hr/> <p>Contracts with liabilities not equal to sum assured</p> <hr/> <p>Other – specify</p> <hr/>	USLHI:p170*4	
153	<p>Which of the aspects of negative bonus stabilisation reserves should the auditor evaluate as part of the audit procedures? Please highlight the relevant answer and add any additional aspects.</p>	<p>Potential for reversal of negative balances within 3 years</p> <hr/> <p>Reasons for consistently negative reserve balances</p> <hr/> <p>Disclosure if in excess of 7,5% of investment account balances</p> <hr/> <p>Appropriateness of future bonus assumptions compared to investment returns</p> <hr/> <p>Other – specify</p> <hr/>	LL Risk Doc	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
154	For products where a retrospective valuation method is used, should the auditor compare the results of the retrospective valuation with those of the prospective valuation to ensure that the retrospective valuation result exceeds the prospective valuation result?	<input type="checkbox"/> Yes <input type="checkbox"/> No	LL Risk Doc	
155	Should the auditor compare the actuarial calculation of the current year with those of prior years and investigate any unexpected variations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SA Guide AppB.23; AuG15.35, .53	
156	If the answer to question 155 was “Yes”, please provide examples of such unexpected variations		SA Guide AppB.23; AuG15.35, .53	
157	How should the auditor evaluate the appropriateness of any “non-product related” reserves (e.g. Aids reserve; data error reserves)?		LL Risk Doc	
158	Please provide a high level description of the audit procedures (tests of controls and/or substantive tests, including analytical procedures) that the auditor should perform to test the completeness of the aggregation of all the actuarial calculations into the total policy liabilities?			
159	How should the auditor test the validity, accuracy and completeness of the journal entries used to capture the valuation result into the accounting records? Please highlight the relevant answer(s) and add any additional methods.	<input type="checkbox"/> Agree to actuarial calculations <input type="checkbox"/> Review reconciling items between actuarial calculations and journal entries <input type="checkbox"/> Review management approval <input type="checkbox"/> Other – specify	USLHI:5.94C; SAAS540.21	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
160	<p>ACTUARIAL EXPERT(S): STAFFING</p> <p>Briefly describe how you maintain the appropriate level of actuarial expertise and competence on the audit. Please highlight the relevant answer(s) and elaborate if a combination of methods is used.</p>	<p>No specific expertise is used—reliance is placed on the statutory actuary in compliance with SAAS620</p> <hr/> <p>Actuaries <i>employed by</i> the audit firm (locally or internationally) serve as audit team members</p> <hr/> <p>Reliance is placed on independent consulting actuaries (engaged by the audit firm or the client) as experts, in compliance with SAAS620</p> <hr/> <p>Combination of the above – elaborate</p>		
161	Does your local or international firm employ qualified actuaries as full time employees?	<p>Yes – local firm</p> <hr/> <p>Yes – international firm</p> <hr/> <p>No</p>		
162	If the answer to question 161 was “Yes”, which of these actuaries are involved in the audit of this client?	<p>Local firm actuaries</p> <hr/> <p>International firm actuaries</p>	PN20:SAS200.2; PN20:SAS520.1; USLHI:5.45	
163	If the answer to question 161 was “Yes”, briefly describe the salient features of the agreement(s) (if any) between the auditors and the firm actuaries on the audit team.			
164	Do you make use of independent actuarial consulting services (i.e. not employees of your local or international firm) as part of the audit process on this client?	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	PN20:SAS200.2; PN20:SAS520.1; USLHI:5.44	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)									
165	What, in your view, are the primary reasons why auditors would make use of independent actuarial consulting services (i.e. not employees of their local or international firm) as part of the audit process? Please highlight the relevant answer(s) and add any additional reasons.	<table border="1"> <tr><td>Assistance required to understand highly technical areas of the valuation</td></tr> <tr><td>Weak control environment over actuarial valuation process</td></tr> <tr><td>Deficient information available from statutory actuary</td></tr> <tr><td>History of significant adjustments to prior period valuations</td></tr> <tr><td>Liquidity or solvency problems</td></tr> <tr><td>Concerns regarding competence, objectivity or integrity of statutory actuary</td></tr> <tr><td>Doubts regarding reasonableness of valuation arising from other audit procedures</td></tr> <tr><td>Other – specify</td></tr> </table>	Assistance required to understand highly technical areas of the valuation	Weak control environment over actuarial valuation process	Deficient information available from statutory actuary	History of significant adjustments to prior period valuations	Liquidity or solvency problems	Concerns regarding competence, objectivity or integrity of statutory actuary	Doubts regarding reasonableness of valuation arising from other audit procedures	Other – specify	SA Guide2.50; PN20:SAS200.2; PN20:SAS520.1; AuG15.14	
Assistance required to understand highly technical areas of the valuation												
Weak control environment over actuarial valuation process												
Deficient information available from statutory actuary												
History of significant adjustments to prior period valuations												
Liquidity or solvency problems												
Concerns regarding competence, objectivity or integrity of statutory actuary												
Doubts regarding reasonableness of valuation arising from other audit procedures												
Other – specify												
166	In cases where auditors make use of independent actuarial consulting services (i.e. not employees of their local or international firm) as part of the audit process, what matters should be contained in the engagement letter of the consulting actuaries? Please highlight the relevant answer(s) and add any additional matters.	<table border="1"> <tr><td>Nature and objective of audit engagement</td></tr> <tr><td>Nature and objectives of consulting actuaries' involvement</td></tr> <tr><td>Materiality and risk considerations</td></tr> <tr><td>Format and timing of communication between parties</td></tr> <tr><td>Purpose of consulting actuaries' report if not primarily for audit purposes</td></tr> <tr><td>Auditor's intended use of consulting actuaries' findings</td></tr> <tr><td>Consulting actuaries' relationships with the client</td></tr> <tr><td>Objectivity requirements</td></tr> <tr><td>Confidentiality requirements</td></tr> </table>	Nature and objective of audit engagement	Nature and objectives of consulting actuaries' involvement	Materiality and risk considerations	Format and timing of communication between parties	Purpose of consulting actuaries' report if not primarily for audit purposes	Auditor's intended use of consulting actuaries' findings	Consulting actuaries' relationships with the client	Objectivity requirements	Confidentiality requirements	Sect5049 AppA; ICANZ606.18, .20- .21; UKSAS520.15, .17-.18
Nature and objective of audit engagement												
Nature and objectives of consulting actuaries' involvement												
Materiality and risk considerations												
Format and timing of communication between parties												
Purpose of consulting actuaries' report if not primarily for audit purposes												
Auditor's intended use of consulting actuaries' findings												
Consulting actuaries' relationships with the client												
Objectivity requirements												
Confidentiality requirements												

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
		Duty to exercise due care		
		Professional standards to be followed		
		Confirmation that expert is qualified to perform the work		
		Duty to make use of all available knowledge of the client		
		Access to client records		
		Consulting actuaries' duty to communicate all relevant information to auditor		
		Nature of source data		
		Responsibility for verification of source data		
		Methods and assumptions used by consulting actuaries and their authority		
		Responsibility regarding subsequent events		
		Nature and content of expert's report		
		Restrictions of use of auditor's or consulting actuaries' reports		
		Ownership of working papers		
		Nature and extent of auditor's review of consulting actuaries' work and findings		
		Administrative matters (e.g. budgets, timing etc.)		
		Other – specify		

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	ACTUARIAL EXPERT(S): STATUTORY ACTUARY			
	Note: Questions 167 - 179 relate to audits during which reliance is placed by the auditor on the work of the statutory actuary as a specialist in accordance with SAAS620 and the relevant existing audit guide. These questions should be answered IRRESPECTIVE of whether you follow this audit strategy on the audit of your particular client.			Ref Q 30- 31
167	Should the auditor have formal permission from management to communicate with the statutory actuary and when necessary, disclose any relevant information to him/her? If "No", please elaborate.	<input type="checkbox"/> Yes <input type="checkbox"/> No - elaborate	SA Guide2.25; Section 5365.10; AUS524.14	
168	Should a formal record of understanding or terms of reference signed by the auditor and the statutory actuary be in place to provide structure to the communication between these parties? If "No", please elaborate.	<input type="checkbox"/> Yes <input type="checkbox"/> No - elaborate	SA Guide2.26; AUS524.12; Sect5049.46; ICANZ606.18; UKSAS520.15	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)																							
169	If your answer to question 168 is “Yes”, what matters should be covered by the record of understanding or terms of reference? Please highlight the relevant answer(s) and add any additional matters.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Roles and responsibilities of each party</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Appointment of the actuary by the appropriate body</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Scope of work of each party</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Intended use of the work of the other party</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Right to communicate to third parties of extent of actuary’s identity and involvement</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Clarification of relationship of actuary with client</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Confidentiality of client information</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Standards to be applied by each party</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Timing of work to be performed</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Format and timing of communication between parties</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Roles and responsibilities of each party		Appointment of the actuary by the appropriate body		Scope of work of each party		Intended use of the work of the other party		Right to communicate to third parties of extent of actuary’s identity and involvement		Clarification of relationship of actuary with client		Confidentiality of client information		Standards to be applied by each party		Timing of work to be performed		Format and timing of communication between parties		Other – specify		SA Guide2.26; S Nagle:9; AuG15.16; Section 5365.11(d); USLHI.5.45; AUS524.12; AUS524.15; Sect5049.39-.42; ICANZ606.18	
Roles and responsibilities of each party																										
Appointment of the actuary by the appropriate body																										
Scope of work of each party																										
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Confidentiality of client information																										
Standards to be applied by each party																										
Timing of work to be performed																										
Format and timing of communication between parties																										
Other – specify																										
170	Should the auditor allow the statutory actuary to rely on the results of the audit work regarding any source data?.	<input type="checkbox"/> Yes <input type="checkbox"/> No	PN20:SAS520.9																							
171	Should the auditor allow the statutory actuary to rely on the results of the audit work regarding any other matters? If “Yes”, please specify any matters other than source data for which you believe reliance to be appropriate.	<input type="checkbox"/> Yes - specify <input type="checkbox"/> No	PN20:SAS520.9																							
172	How should the auditor ensure consistency in definitions and frameworks between the audit team and the statutory actuary in respect of developments relating to the measurement of insurance contracts at fair value?		SAAS545.31; PGN104 Addendum 2003																							

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)																													
173	During which phase of audit planning should the first meeting with the statutory actuary take place?. Please highlight the relevant answer or specify another phase.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Updating knowledge of the business</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Understanding accounting systems and internal controls</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Updating knowledge of the business		Understanding accounting systems and internal controls		Other – specify		SA Guide2.30; Sect5365.04																							
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Understanding accounting systems and internal controls																																
Other – specify																																
174	Which matters should be discussed with the statutory actuary and documented during the planning phase of the audit? Please highlight the relevant answer(s) and add any additional matters.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Confirmation of appointments</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Professional qualifications</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Professional standards to be applied</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Nature of work performed by the auditor</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Context in which auditor intends to use work of the statutory actuary</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Specific work of the statutory actuary that the auditor intends to use</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Specific work of the auditor that the statutory actuary intends to use</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Timing of work to be performed by each party</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Reporting deadlines</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Definitions and application of specific concepts underlying professional standards of each profession</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Materiality</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Monitoring of subsequent events</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Responsibility for verification of source data</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Confirmation of appointments		Professional qualifications		Professional standards to be applied		Nature of work performed by the auditor		Context in which auditor intends to use work of the statutory actuary		Specific work of the statutory actuary that the auditor intends to use		Specific work of the auditor that the statutory actuary intends to use		Timing of work to be performed by each party		Reporting deadlines		Definitions and application of specific concepts underlying professional standards of each profession		Materiality		Monitoring of subsequent events		Responsibility for verification of source data		Other – specify		SA Guide2.30; Section 5365.11(d); PN20:SAS200.6; AUS524.15	
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QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)																							
175	Which matters should be discussed with the statutory actuary and documented during the execution phase of the audit? Please highlight the relevant answer(s) and add any additional matters.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Departures from agreed approaches</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Unforeseen circumstances</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Weaknesses in controls</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Material fraud or errors</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Departures from agreed approaches		Unforeseen circumstances		Weaknesses in controls		Material fraud or errors		Other – specify		SA Guide2.31													
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Unforeseen circumstances																										
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Material fraud or errors																										
Other – specify																										
176	What documentation produced by the actuarial department of the client, can be used for audit purposes? Please highlight the relevant answer(s) and add any additional documentation.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Letter of appointment/engagement of statutory actuary</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Selection of assumptions</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Selection of methods</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Materiality guidelines</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Effects of use of approximations</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Verification of data</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Validation of calculations</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Reliance on or use of the work of others</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Validation of reasonableness of valuation</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Valuation report to board of directors</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Other – specify</td></tr> <tr><td style="padding: 2px;"> </td></tr> </table>	Letter of appointment/engagement of statutory actuary		Selection of assumptions		Selection of methods		Materiality guidelines		Effects of use of approximations		Verification of data		Validation of calculations		Reliance on or use of the work of others		Validation of reasonableness of valuation		Valuation report to board of directors		Other – specify		AuG15.21; AUS524.15; AUS524.27-.28; Sect5049.72	
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QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
177	Arrange the steps in the reporting process, in the order in which they should take place on an audit by inserting a consecutive number in each block where 1 = the first step. Add any steps not represented in the blocks and provide them with the appropriate numbers.	Auditor issues audit report on financial statements. NR:_____ Statutory actuary sends report with valuation results to auditor. NR:_____ Statutory actuary reports to Registrar. NR:_____ Statutory actuary issues report to management and report to be included in annual report. NR:_____ Auditor sends report to statutory actuary with results of procedures on which actuary relies. NR:_____ Other – specify. NR:_____ 	SA Guide2.32	
178	Should the auditor obtain a management representation from the statutory actuary?	<input type="checkbox"/> Yes <input type="checkbox"/> No	USLHI:5.46; AuG15.37	Ref Q 190
179	If the answer to question 178 was “Yes”, what significant matters should be covered by the management representation?		USLHI:5.46; 5.125(15) – (19); AuG15.37	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	<p>ACTUARIAL EXPERT(S): GENERAL</p> <p>Note: For questions 180 – 185, the terms “actuarial expert” and “expert” refer to the person(s) on whose work the auditor places reliance regarding actuarial matters. Depending on the circumstances, the expert may be one or a combination of:</p> <ul style="list-style-type: none"> • your client’s statutory actuary; • actuaries employed by your local or international firm forming part of your audit team; • consulting actuaries engaged by the client; • consulting actuaries engaged by your firm. 			
180	<p>Which factors should the auditor take into account in assessing the risk of error in the actuarial expert’s work? Please highlight the relevant answer(s) and add any additional factors.</p> <p><i>(If you make use of actuaries employed by your firm, the quality of these team members may be assessed as part of your firm’s overall quality control procedures instead of on the specific engagement. If this is the case, the question should be answered also taking into account factors considered at firm level (i.e. these should be included in the answer.))</i></p>	<p>Your confidence in the expert’s expertise and competence (e.g. membership of ASSA or international equivalent)</p> <hr/> <p>Inherent risk in source data</p> <hr/> <p>Previous experience with the expert</p> <hr/> <p>Expert’s reputation</p> <hr/> <p>Objectivity and independence</p> <hr/> <p>Ease of communication</p> <hr/> <p>Expert’s perceived understanding of auditor’s objectives, standards and procedures</p> <hr/> <p>Degree of co-operation</p> <hr/> <p>Reasonableness of expert’s findings in light of auditor’s knowledge</p> <hr/> <p>Sensitivity of findings to changes in assumptions</p> <hr/> <p>Other – specify</p> <hr/>	Sect5049.57	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)										
181	When the auditor reviews the findings (report) of the actuarial expert, which factors should be considered? Please highlight the relevant answer(s) and add any additional factors.	<table border="1"> <tr><td>Neutral in tone</td></tr> <tr><td>Logically presented with reference to scope etc.</td></tr> <tr><td>Reference to auditor's objectives & criteria</td></tr> <tr><td>Compatibility with auditor's other knowledge</td></tr> <tr><td>Consistency with reviews of expert's working papers</td></tr> <tr><td>Consistency with record of understanding</td></tr> <tr><td>Existence and implications of qualifications/reservations</td></tr> <tr><td>Impact of restrictions on use and impact on audit</td></tr> <tr><td>Other - specify</td></tr> </table>	Neutral in tone	Logically presented with reference to scope etc.	Reference to auditor's objectives & criteria	Compatibility with auditor's other knowledge	Consistency with reviews of expert's working papers	Consistency with record of understanding	Existence and implications of qualifications/reservations	Impact of restrictions on use and impact on audit	Other - specify	Sect5049.61	
Neutral in tone													
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Consistency with reviews of expert's working papers													
Consistency with record of understanding													
Existence and implications of qualifications/reservations													
Impact of restrictions on use and impact on audit													
Other - specify													
182	Should the auditor experience any doubt about the completeness or appropriateness of any aspect of the work of the actuarial expert, what additional procedures should be performed? Please highlight the relevant answer(s) and add any additional procedures. Please specify the nature of a second expert if selected.	<table border="1"> <tr><td>Additional enquiry</td></tr> <tr><td>Examination of documentary evidence obtained by expert</td></tr> <tr><td>Analytical procedures – specify</td></tr> <tr><td>Reperformance of calculations</td></tr> <tr><td>Review of expert's working papers</td></tr> <tr><td>Use of second expert – specify</td></tr> <tr><td>Other – specify</td></tr> </table>	Additional enquiry	Examination of documentary evidence obtained by expert	Analytical procedures – specify	Reperformance of calculations	Review of expert's working papers	Use of second expert – specify	Other – specify	Sect5049.65-.67			
Additional enquiry													
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Other – specify													

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)							
183	Under which circumstances should the auditor review the working papers of the actuarial expert? Please highlight the relevant answer(s) and add any additional circumstances.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Never</td></tr> <tr><td style="padding: 2px;">Always, comprehensively</td></tr> <tr><td style="padding: 2px;">Always, but only to the extent that the auditor needs to understand and interpret the impact of the expert's findings on the financial statements</td></tr> <tr><td style="padding: 2px;">Only when I have significant doubt about the expert's work and findings that cannot be otherwise resolved</td></tr> <tr><td style="padding: 2px;">Other - specify</td></tr> </table>	Never	Always, comprehensively	Always, but only to the extent that the auditor needs to understand and interpret the impact of the expert's findings on the financial statements	Only when I have significant doubt about the expert's work and findings that cannot be otherwise resolved	Other - specify	Sect5049.68		
Never										
Always, comprehensively										
Always, but only to the extent that the auditor needs to understand and interpret the impact of the expert's findings on the financial statements										
Only when I have significant doubt about the expert's work and findings that cannot be otherwise resolved										
Other - specify										
184	Under which circumstances should the auditor consider the use of a second actuarial expert? Please highlight the relevant answer(s) and add any additional circumstances.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Exceptionally high significance and risk of error in initial expert's work or findings</td></tr> <tr><td style="padding: 2px;">Inadequate work or biased findings in initial expert's work</td></tr> <tr><td style="padding: 2px;">Expert's findings conflict with those of rest of assurance team</td></tr> <tr><td style="padding: 2px;">Auditor had to reperform aspects of initial expert's work</td></tr> <tr><td style="padding: 2px;">Auditor had to review initial expert's working papers and found them highly technical and difficult to understand</td></tr> <tr><td style="padding: 2px;">Initial expert's report difficult to understand and interpret</td></tr> <tr><td style="padding: 2px;">Disagreement between auditor and initial expert (e.g. assumptions, methods)</td></tr> </table>	Exceptionally high significance and risk of error in initial expert's work or findings	Inadequate work or biased findings in initial expert's work	Expert's findings conflict with those of rest of assurance team	Auditor had to reperform aspects of initial expert's work	Auditor had to review initial expert's working papers and found them highly technical and difficult to understand	Initial expert's report difficult to understand and interpret	Disagreement between auditor and initial expert (e.g. assumptions, methods)	Sect5049.69; AIPCA AU336.13
Exceptionally high significance and risk of error in initial expert's work or findings										
Inadequate work or biased findings in initial expert's work										
Expert's findings conflict with those of rest of assurance team										
Auditor had to reperform aspects of initial expert's work										
Auditor had to review initial expert's working papers and found them highly technical and difficult to understand										
Initial expert's report difficult to understand and interpret										
Disagreement between auditor and initial expert (e.g. assumptions, methods)										

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)												
185	What documentation regarding the use of an actuarial expert, should be included in your audit working papers? Please highlight the relevant answer(s) and add any additional documentation.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="height: 20px;">Reasons for use of an expert</td></tr> <tr><td style="height: 20px;">Reasons for selecting particular expert</td></tr> <tr><td style="height: 20px;">Expert's role in engagement</td></tr> <tr><td style="height: 20px;">Reasons for selecting this audit strategy</td></tr> <tr><td style="height: 20px;">Important communications with expert</td></tr> <tr><td style="height: 20px;">Expert's expertise (incl. qualifications), competence, objectivity and integrity</td></tr> <tr><td style="height: 20px;">Description of expert's work</td></tr> <tr><td style="height: 20px;">Notes on auditor's work on expert's work and findings (incl. any review of working papers)</td></tr> <tr><td style="height: 20px;">Expert's report and findings</td></tr> <tr><td style="height: 20px;">Auditor's assessment of relevance of expert's findings to objective of engagement and auditor's opinion</td></tr> <tr><td style="height: 20px;">Other – specify</td></tr> </table>	Reasons for use of an expert	Reasons for selecting particular expert	Expert's role in engagement	Reasons for selecting this audit strategy	Important communications with expert	Expert's expertise (incl. qualifications), competence, objectivity and integrity	Description of expert's work	Notes on auditor's work on expert's work and findings (incl. any review of working papers)	Expert's report and findings	Auditor's assessment of relevance of expert's findings to objective of engagement and auditor's opinion	Other – specify	Sect5049.74	
Reasons for use of an expert															
Reasons for selecting particular expert															
Expert's role in engagement															
Reasons for selecting this audit strategy															
Important communications with expert															
Expert's expertise (incl. qualifications), competence, objectivity and integrity															
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Notes on auditor's work on expert's work and findings (incl. any review of working papers)															
Expert's report and findings															
Auditor's assessment of relevance of expert's findings to objective of engagement and auditor's opinion															
Other – specify															
	ANALYTICAL PROCEDURES														
186	Which Key Performance Indicators (e.g. risk profits, embedded value of new business, number of in-force policies etc.) of the business relating to policy liabilities under insurance contracts and the related earnings , as monitored by management, should the auditor review as part of analytical procedures?														
187	Which other analytical procedures specifically relating to policy liabilities and the related earnings should the auditor perform during the audit?		USLHI:6.13(a),(b); USLHI:5.36; USLHI:5.92; USLHI:p171; 174-175; 194; AuG15.40; SA Guide.60; PN20:SAS300.6; SA Guide.50												

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
188	In performing analytical procedures relating to policy liabilities and the related earnings, what available market or industry information should the auditor make use of?			
189	Is industry information useful for audit purposes generally readily available to auditors of South African long-term insurers?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	MISCELLANEOUS			
190	Apart from specific management representations obtained from the statutory actuary, please describe any management representations relating to policy liabilities under insurance contracts and the related earnings are obtained from “general” management? If none, please indicate as such.		SAAS545.63	Ref Q 178
191	If an insurer has an implicit or explicit Deferred Acquisition Costs (DAC) and/or Unrecouped Expense Account (debtor for related fees) balance, how should the auditor test the recoverability thereof?		USLHI:5.94A.2(c)	Ref Q2
192	How should the auditor test the calculation (accuracy) of the balances on DAC and/or unrecouped expense accounts?		LL Risk Doc	Ref Q2
193	Should the auditor test that DAC and/or unrecouped expense account balances are correctly taken into account in the calculation of surrender values?	<input type="checkbox"/> Yes <input type="checkbox"/> No	LL Risk Doc	Ref Q2
194	Does your client perform a loss recognition test (liability adequacy test) on non-profitable insurance contracts?	<input type="checkbox"/> Yes <input type="checkbox"/> No	IFRS4.15	
195	How should the auditor test that the loss recognition test has been consistently and properly applied?		IFRS4.15	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	In answering questions 196 – 199, please assume that the extent of reinsurance is material.			
196	What aspects of (changes in) the reinsurance arrangements (ceded and assumed) of the client should the auditor review as part of the audit?		PN20:SAS200.3; USLHI:5.13(m); USLHI:8,91(i);AuG15.57	Ref Q 53- 54
197	Should the auditor review significant reinsurance contracts (ceded and assumed) of the client?	<input type="checkbox"/> Yes <input type="checkbox"/> No	AuG15.57	Ref Q 53- 54
198	How should the auditor assess the financial strength of reinsurance cessionaries (i.e. reinsurers to whom risks have been ceded)?		USLHI:5.13(n); AuG15.58; PGN106:5.9	Ref Q 53- 54
199	Should the auditor review data being sent to reinsurers / received from reinsurers by the client as part of the audit process?	<input type="checkbox"/> Yes <input type="checkbox"/> No	AuG15.59	Ref Q 53- 54
200	Should the auditor review the investment management mandates for each major product line to ascertain whether assets and liabilities and expected future cash flows are appropriately matched?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SA Guide.50; PN20:SAS480.1	
201	How should the auditor test the degree of matching of investments and policy liabilities as regards future cash flows?		SA Guide.50; PN20:SAS300.5; USLHI5.12(f); AuG15.26; PGN106:5.11	
202	How should the auditor test the sufficiency of future investment income and capital growth of investments to meet investment return guarantees?		SA Guide.50	
203	Should the auditor test compliance of provisions for investment return guarantees with the requirements of PGN110?	<input type="checkbox"/> Yes <input type="checkbox"/> No	LL Risk Doc	
204	Should the auditor test that quotations to potential clients are in compliance with the product design and pricing approved by the statutory actuary and management?	<input type="checkbox"/> Yes <input type="checkbox"/> No	LL Risk Doc	

QUESTIONNAIRE: AUDIT APPROACHES

PARTS B5 – B7 – PROCEDURES: NATURE, TIMING, EXTENT

Nr	Question	Answer	Source(s)	
	DISCLOSURE			
205	Should the auditor evaluate whether disclosures about fair values of insurance contracts are in accordance with the relevant financial reporting framework (PGN103; PGN 104; AC121 etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SAAS545.20;.56-60	
206	Should the auditor evaluate whether disclosure of fair value information relating to measurement uncertainty of insurance contracts is adequate for users of financial statements?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SAAS545.59	
207	Should the auditor evaluate disclosure of changes in the valuation method and assumptions?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SAAS545.59	Ref Q77 ; 140
208	To identify any matters relating to policy liabilities under insurance contracts and the related earnings that may be of audit significance, should the auditor review correspondence with the following parties: <ul style="list-style-type: none"> - Registrar of Long-Term Insurers - SARS - Ombudsman - Other – specify? 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	USLHI:p174*14	
	TIMING			
209	Which types of audit procedures related to insurance contracts and the related earnings (if any) can be performed prior to the client’s year-end ? For each type of procedure mentioned, please indicate approximately how many months prior to the client’s year-end can it can be performed.		General: SAAS 300.09	
210	Which items relevant to policy liabilities under insurance contracts and the related earnings should the auditor include in the subsequent events review? Please highlight the relevant answer(s) and add any additional items.	Claims information	PN20:SAS150.2; USLHI:5.12(q); SAS545.53 - .55	
		Economic indicators		
		Factors affecting mortality/morbidity assumptions		
		Other – specify		

QUESTIONNAIRE: AUDIT APPROACHES

PART B8 – CO-ORDINATION AND STAFFING

Nr	Question	Answer	Source(s)	
211	Does your client's internal audit function perform any internal audit work specifically related to the audit of policy liabilities under insurance contracts and the related earnings?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SAAS610	Ref Q22
212	If the answer to question 211 was "Yes", briefly describe the scope of any internal audit work your client's internal audit function performs specifically related to actuarial assumptions . If none, please indicate as such.			Ref Q22
213	If the answer to question 211 was "Yes", briefly describe the scope of any internal audit work your client's internal audit function performs specifically related to source data used in the actuarial valuation process . If none, please indicate as such.			Ref Q22
214	If the answer to question 211 was "Yes", briefly describe the scope of any internal audit work your client's internal audit function performs specifically related to calculations done as part of the actuarial valuation process . If none, please indicate as such.			Ref Q22
215	If the answer to question 211 was "Yes", briefly describe the scope of any internal audit work your client's internal audit function performs specifically related to the reporting of the results of the actuarial valuation . If none, please indicate as such.			Ref Q22
216	If the answer to question 211 was "Yes", do you as external auditor rely on any audit work performed by the client's internal audit function, related to insurance contract liabilities and the related earnings?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SAAS610	
217	Briefly describe the different roles that exist within your audit team (e.g. partner, manager, IT specialist etc.) Next to each role, please indicate the number of team members in the particular role.			

QUESTIONNAIRE: AUDIT APPROACHES

PART B8 – CO-ORDINATION AND STAFFING

Nr	Question	Answer	Source(s)	
218	<p>On average, how many years of audit experience on long-term insurance clients does an audit team member in each of the following roles have:</p> <ul style="list-style-type: none"> • partner • manager • IT specialist • actuarial specialist • accounting and auditing technical specialist • long-term insurance industry specialist • other (specify)? 	<p>_____years _____years _____years _____years _____years _____years _____years</p>		
219	<p><i>(In answering this question, please interpret the term “training” in a wide sense to include, for example, on the job training received from senior staff, reading relevant literature and interaction with actuaries.)</i></p> <p>On average, how many hours per year does an audit team member in each of the following roles spend receiving specialised training for auditors of long-term insurers:</p> <ul style="list-style-type: none"> - partner - manager - IT specialist - actuarial specialist - accounting and auditing technical specialist - long-term insurance industry specialist - other (specify)? 	<p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p> <p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p> <p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p> <p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p> <p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p> <p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p> <p><input type="checkbox"/> 1-8 <input type="checkbox"/> 9-16 <input type="checkbox"/> 17-24 <input type="checkbox"/> >24</p>		

QUESTIONNAIRE: AUDIT APPROACHES

PART B9 – OTHER MATTERS

Nr	Question	Answer	Source(s)
220	Has your audit strategy for insurance contracts and the related earnings changed significantly since the introduction of SAAS620 in 1998? Please provide reasons for your answer.	<input type="checkbox"/> Yes – elaborate <input type="checkbox"/> No - elaborate	
221	If the answer to question 220 was “Yes”, please provide a brief description of the relevant significant changes to your audit strategy as well as the reason(s) for each change.		
222	<p>What challenges and problems (if any) are you currently experiencing regarding the audit of the policy liabilities under insurance contracts and the related earnings? Please highlight the relevant answer(s) and add any additional challenges/problems.</p> <p>Fore each challenge/problem, please provide a brief description of how you are attempting to address/solve it.</p>	<input type="checkbox"/> Lack of experience of audit staff <input type="checkbox"/> Complexity of actuarial processes and calculations <input type="checkbox"/> Independence/objectivity of statutory actuary <input type="checkbox"/> Competence of the statutory actuary <input type="checkbox"/> Appropriateness of work of statutory actuary as audit evidence <input type="checkbox"/> Strained relationship between two professions <input type="checkbox"/> Improper project management by auditors / actuarial department <input type="checkbox"/> Unwarranted reliance on work of the statutory actuary <input type="checkbox"/> Timing of communication and reports <input type="checkbox"/> Other – specify	PvW's articles in Acc. SA

QUESTIONNAIRE: AUDIT APPROACHES

PART B9 – OTHER MATTERS

Nr	Question	Answer	Source(s)	
223	<p>What challenges and problems (if any) experienced by you in the past regarding the audit of the policy liabilities under insurance contracts and the related earnings, have since been resolved? Please highlight the relevant answer(s) and add any additional challenges/problems.</p> <p>For each challenge/problem highlighted, please provide a brief description of how it was resolved.</p>	<p>Lack of experience of audit staff</p> <hr/> <p>Complexity of actuarial processes and calculations</p> <hr/> <p>Independence/objectivity of statutory actuary</p> <hr/> <p>Competence of the statutory actuary</p> <hr/> <p>Appropriateness of work of statutory actuary as audit evidence</p> <hr/> <p>Strained relationship between two professions</p> <hr/> <p>Improper project management by auditors / actuarial department</p> <hr/> <p>Unwarranted reliance on work of the statutory actuary</p> <hr/> <p>Timing of communication and reports</p> <hr/> <p>Other – specify</p> <hr/>		
224	<p>In what respect(s) will your audit strategy be different for the audit of a smaller, non-listed South African long-term insurer? If none, please indicate as such.</p>			

QUESTIONNAIRE: AUDIT APPROACHES

ADMINISTRATIVE MATTERS

DECLARATION BY ENGAGEMENT PARTNER:

I, _____ (full name and surname) hereby declare that I have reviewed the entire questionnaire and am satisfied that the information contained therein is accurate and complete to the best of my knowledge and belief.

Signed: _____

Date: _____

Problems encountered during completion of the questionnaire (if none, please indicate as such).

APPENDIX H

Deloitte request for comment and input

DELOITTE INSTRUCTIONS FOR INPUT AND COMMENTS

Thank you for agreeing to provide your input and comments to Chapters 4, 5 and 6 of my dissertation as discussed telephonically.

The purpose of this document is to provide you with some brief overall guidelines for the comment process.

A. BACKGROUND

General

1. It is important to remain mindful of research objective and scope as set out in Chapter 2 that was previously sent to you via e-mail and is also included in the file for reference purposes. Whereas all comments and input are welcomed, they should as far as possible be restricted to the stated research objective and scope which has been agreed with the promoter, the University of Stellenbosch and SAICA.
2. The above-mentioned research objective has been amended slightly subsequent to the writing of Chapter 2 as submitted to you. The objective is no longer to develop a best practice audit approach, but now to develop a **framework for the formulation of** a best practice overall audit strategy for the components mentioned.
3. The scope of the research assumes that the IFRS 4 classification of insurance products between “insurance contracts” and “investment contracts” has been completed. The focus of the research is accordingly mainly on policy liabilities arising under insurance contracts and the related earnings, as opposed to investment contracts.
4. The format of the documentation submitted to you is currently academic. As part of the SAICA project, it will perform a function similar to that of audit working papers supporting the development of and conclusions in the SAICA guide(s) to be developed based on this research.
5. The chapters contain highlights and brackets (“[“ and “]”) that are used for administrative purposes in the dissertation writing process. Please ignore these items for the purpose of your comments.
6. A very limited number of the above-mentioned brackets and highlights contain indications that some follow-ups are still outstanding. Although one short follow-up meeting still needs to be conducted, the documents submitted to you have been updated with all information received until the end of 9 March 2005. I do not expect the above-mentioned follow-up meeting to result in significant changes to any of the current findings or conclusions.

7. Chapters 5 and 6 contain sections with a demographic analysis of responses. Your comment is not required on all elements thereof. Please apply your judgement to decide where your comments will be useful in these sections.
8. The chapters still contain various references to South African Auditing Standards (SAAS). Please ignore these, as they will all be updated to the IAASB references.

Format of submission

1. Copies of Chapters 4, 5 and 6 are provided with pages and lines numbered. Line numbering starts from "1" on each page. A copy of the questionnaire used in the research is also provided for reference purposes. No comments or input is required on the questionnaire.
2. Comments and input should please be provided in the following format:
 - a. In **hard copy** with references to the relevant chapter, page and line numbers.
 - b. With the declaration and acknowledgement in Appendix A to these instructions signed by yourselves for evidential purposes.

In this regard, please do not hesitate to make notes and annotations on the documents in the file submitted to you. For evidential purposes, however, all documents in the file should kindly be returned to me after completion of the comment process.

3. Please complete all comments and input for submission to me by the end of **Friday 1 April 2005**. Arrangements for submission will be made at our meeting on Friday 11 March 2005.
4. Should any question or problems arise during any stage of the process, please do not hesitate to contact me telephonically on the cellphone number provided in Part D below. I shall unfortunately not have access to e-mail until the submission date.

B. SPECIFIC REQUESTS FOR COMMENT

1. With regard to explicit or implicit conclusions reached in the chapters, based on the research findings, please specifically comment as follows:
 - For existing conclusions based on a *majority view* (3 or more responses):
 - If you **agree** with the majority view, please indicate as such: no reasons are required unless you want to provide them (result: your view is added in further support of the majority view).

- If you **disagree** with the majority view, please indicate as such **and** provide your **reasons** (result: your view will change the level of support for the majority view from 4/4 or 3/4, to 4/5 or 3/5, both of which are still majority views).
 - For existing conclusions based on the *views of at least half* (2 or more) of the respondents:
 - Please indicate which of the findings/views you support **and** your **reasons** (result: your view “creates” a majority (3/5) or minority (2/5) view from the existing 2/4 view and changes the conclusion to support the majority view). Your reasons are particularly important in these cases.
 - For existing minority findings (1 or 0 out of four):
 - If you support these findings, please indicate as such **and** provide your **reasons** (result: your view will be recorded as strengthening the minority view to 1/5 or 2/5, but will still be regarded as a minority view).
2. The responses to some questions have been recorded in the text, for example “all respondents indicated that ...” or “two respondents indicated that ... whereas the other two indicated that ...”. Please treat these views in the same way as those recorded in tables and lists, in accordance with the request in (1) above.
3. Please suggest additional types of audit procedures, job titles to be enquired from by the auditor etc. in addition to those already included in bulleted lists and tables in the chapter.

C. GENERAL REQUEST FOR COMMENT

Please provide any comments on the structure and content of the chapters in general relative to the objective and scope of the research.

D. CONTACT DETAILS

Prof SPJ (Pieter) von Wielligh
 Department of Accounting
 University of Stellenbosch
 Private Bag X1
 MATIELAND
 7602

Cellphone: 083 441 8026
Landline: (021) 808 3846
Fax: (021) 886 4176

APPENDIX A

DECLARATION BY REVIEWERS:

We,

and

(full names and surnames)

hereby declare that we have reviewed Chapters 4, 5 and 6 of the dissertation as submitted to us and are satisfied that the information contained in our comments and input is accurate and complete to the best of our knowledge and belief.

Signed: _____ and _____

Date: _____

REQUEST FOR USE OF NAMES IN ACKNOWLEDGEMENT

We hereby consent to the mention of the names of our firm and ourselves in the acknowledgements in the dissertation.

Signed: _____

Signed: _____

APPENDIX I

**Research questionnaire relating to assessment of inherent
risk**



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

Dear Sir/Madam

Thank you for agreeing to participate in this research project. The completion of the attached questionnaire should take up no more than **15 minutes** of your valuable time. I also undertake to share the final results of the research with you in a way that strictly protects confidentiality.

As discussed telephonically, I am currently doing research for my PhD degree on the audit of policy liabilities of, as well as profit recognition and measurement by listed South African long-term insurers. This research is expected to be of value to auditors of all South-African long-term insurers, as well as standard setters.

A component of this research includes the assessment of inherent risks by auditors of the aforementioned companies, in an endeavour to develop a Relative Inherent Risk Index to rank account balances according to inherent risk.

I have identified eight **indicators of inherent risk** at the account balance and related assertion level (i.e. not at the “financial statement as a whole” level), namely:

1. The nature of the asset, liability or transaction reflected in the account (cash, for example, is exposed to a higher risk of theft (the existence assertion), than a property);
2. History of errors in the account;
3. The complexity of transactions reflected in the account;
4. The degree of judgement involved in determining the account balance;
5. The inclusion of unusual transactions, not subject to routine processing, in the account, particularly near period end (the frequency of transactions) (this factor encompasses the experience level of client staff involved in processing entries to the account);
6. The risk of fraud contained in the account balance or class of transactions;
7. The materiality of the account balance and potential misstatement contained therein, including the number of transactions; and
8. Valuations that vary significantly in accordance with variances in economic factors.

I have also identified five **significant account balances** (balance sheet) and classes of transactions (income or operating statement) that are specific to financial statements of long-term insurers (“industry specific”), namely:

1. Premiums from long-term insurance policies;
2. Commission paid to long-term insurance intermediaries;
3. Policy benefits (claims) paid to long-term insurance policyholders;
4. Liabilities to policyholders under unmatured policies (“policy liabilities”); and
5. Operating profit from long-term insurance activities.

INSTRUCTIONS FOR COMPLETION

1. The questionnaire below requires you to assess in matrix format, *for a relatively "normal" financial year in the business of your long-term insurance client*, the inherent risk for the particular assertion, as it applies to each of the account balances or classes of transactions as indicated, based solely on each of the indicators of inherent risk.

For example:

For the Valuation / Measurement assertion matrix in the questionnaire, using indicator "4: Degree of judgement involved":

Ask yourself: "Considering the *degree of judgement involved* in *premiums*, would I assess the inherent risk of premiums being *measured* inappropriately as "high" or "low"?"

If the answer is "high", place a "X" in the appropriate block in the matrix. If the answer is "low", leave the block blank.

2. It is important that, for each assertion related to each account, you consider the inherent risk **separately** for **each indicator in isolation**.
3. I have already completed the assessment for the indicators "History of Errors" and "Materiality" for all accounts and assertions, as these are dependent on client specific matters, and therefore have no direct bearing on the requirements. Also, note that the income or operating statement items for the assertion "Rights and Obligations" have been marked "Not Applicable", as this assertion by definition only applies to balance sheet items.
4. Please provide any additional comments or suggestions you may have, on a separate sheet. They are most welcome.
5. Please either e-mail (pvw@sun.ac.za) or fax (021-886 4176) your responses back to me by the date requested below.

Please do not hesitate to contact me on (021) 808 3846 or 083 441 8026 should you have any difficulty in completing the questionnaire, or would like to further discuss the matter.

I would be most grateful if you could let me have your responses by the close of business on **FRIDAY 9 MAY 2003**, to expedite the completion of the research and the sharing of the results with you.

Again, your co-operation and contribution to the success of this research is greatly appreciated.

Yours faithfully

Pieter von Wielligh
PROF SPJ VON WIELLIGH CA(SA)

QUESTIONNAIRE

COMPLETENESS

INDICATOR	INDUSTRY-SPECIFIC ELEMENT OF FINANCIAL STATEMENTS OF LONG-TERM INSURERS				
	Premiums	Commis- sion	Policy benefits	Policy liabilities	Operating profit
1. Nature of the item					
2. History of errors	X	X	X	X	X
3. Complexity of transactions					
4. Degree of judgement involved					
5. Unusual transactions					
6. Risk of fraud					
7. Materiality	X	X	X	X	X
8. Volatile valuations					

Key:
X = The assertion as it relates to the particular account balance or class of transactions, is potentially exposed to a high level of inherent risk if assessed solely according to the specific indicator.

EXISTENCE / OCCURRENCE

INDICATOR	INDUSTRY-SPECIFIC ELEMENT OF FINANCIAL STATEMENTS OF LONG-TERM INSURERS				
	Premiums	Commis- sion	Policy benefits	Policy liabilities	Operating profit
1. Nature of the item					
2. History of errors	X	X	X	X	X
3. Complexity of transactions					
4. Degree of judgement involved					
5. Unusual transactions					
6. Risk of fraud					
7. Materiality	X	X	X	X	X
8. Volatile valuations					

Key:
X = The assertion as it relates to the particular account balance or class of transactions, is potentially exposed to a high level of inherent risk if assessed solely according to the specific indicator.

VALUATION / MEASUREMENT

INDICATOR	INDUSTRY-SPECIFIC ELEMENT OF FINANCIAL STATEMENTS OF LONG-TERM INSURERS				
	Premiums	Commis- sion	Policy benefits	Policy liabilities	Operating profit
1. Nature of the item					
2. History of errors	X	X	X	X	X
3. Complexity of transactions					
4. Degree of judgement involved					
5. Unusual transactions					
6. Risk of fraud					
7. Materiality	X	X	X	X	X
8. Volatile valuations					

Key:
X = The assertion as it relates to the particular account balance or class of transactions, is potentially exposed to a high level of inherent risk if assessed solely according to the specific indicator.

RIGHTS AND OBLIGATIONS (applies to balance sheet accounts only)

INDICATOR	INDUSTRY-SPECIFIC ELEMENT OF FINANCIAL STATEMENTS OF LONG-TERM INSURERS				
	Premiums	Commis- sion	Policy benefits	Policy liabilities	Operating profit
1. Nature of the item	N/A	N/A	N/A		N/A
2. History of errors	N/A	N/A	N/A	X	N/A
3. Complexity of transactions	N/A	N/A	N/A		N/A
4. Degree of judgement involved	N/A	N/A	N/A		N/A
5. Unusual transactions	N/A	N/A	N/A		N/A
6. Risk of fraud	N/A	N/A	N/A		N/A
7. Materiality	N/A	N/A	N/A	X	N/A
8. Volatile valuations	N/A	N/A	N/A		N/A

Key:
X = The assertion as it relates to the particular account balance or class of transactions, is potentially exposed to a high level of inherent risk if assessed solely according to the specific indicator.

PRESENTATION AND DISCLOSURE

INDICATOR	INDUSTRY-SPECIFIC ELEMENT OF FINANCIAL STATEMENTS OF LONG-TERM INSURERS				
	Premiums	Commis- sion	Policy benefits	Policy liabilities	Operating profit
1. Nature of the item					
2. History of errors	X	X	X	X	X
3. Complexity of transactions					
4. Degree of judgement involved					
5. Unusual transactions					
6. Risk of fraud					
7. Materiality	X	X	X	X	X
8. Volatile valuations					

Key:
X = The assertion as it relates to the particular account balance or class of transactions, is potentially exposed to a high level of inherent risk if assessed solely according to the specific indicator.

APPENDIX J

**Relative Inherent Risk Index per account with
individual responses**

RELATIVE INHERENT RISK INDEX PER ACCOUNT WITH INDIVIDUAL RESPONSES

SUMMARY OF COMBINED RESPONSES PER ASSERTION (all responses combined)						
ACCOUNT	LEVEL OF EXPOSURE TO INHERENT RISK INDICATORS					RIRI
	C	E/O	V/M	R&O	P&D	
Premiums	28%	38%	39%	N/A	36%	35%
Commission	42%	33%	41%	N/A	36%	38%
Policy benefits	33%	52%	58%	N/A	36%	45%
Policy liabilities	77%	52%	80%	67%	59%	67%
Operating profit/ Earnings	53%	48%	58%	N/A	45%	51%

SUMMARY OF INDIVIDUAL RESPONSES PER ACCOUNT (all assertions combined)							
RELATIVE INHERENT RISK INDEX PER ACCOUNT							
1	2	3	4	5	6	7	8
31%	28%	28%	44%	44%	44%	31%	31%
31%	59%	28%	41%	41%	41%	31%	31%
38%	41%	31%	59%	59%	59%	34%	34%
55%	83%	48%	75%	75%	75%	63%	63%
53%	81%	28%	38%	53%	38%	59%	59%

495

KEY:

- RIRI = Relative Inherent Risk Index (refer to Chapter 3, Section 7: *Empirical study and results*)
- C = Completeness assertion
- E/O = Existence / Occurrence assertion
- V/M = Valuation / Measurement assertion
- R&O = Rights and Obligations assertion
- P&D = Presentation and Disclosure assertions